RESEARCHES

INTO THE

EARLY HISTORY

OF

THE VIOLIN FAMILY

BY

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PREFACE.

THE author of this book has gone to his rest before the last revision of it. How little had been left for consideration or change is shown in that I have added only four footnotes to the text. For that text, its deep learning, ingenious research and happy illustration, no one can be more grateful than myself. I call attention especially to the interesting chain of reasoning which derives the Mediæval Rotte from the old Greek Lyre. But that is only a single instance of many in this admirable essay, of practical discernment in remote ways where we have but faint light to guide us. Respect for Carl Engel and his life's work will last as long as there exists any desire to know, and disposition to assimilate, those musical facts, historical or ethnological, which lie outside our every-day experience.

A. J. HIPKINS.

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CONTENTS.

AVAILABLE EVIDENCES.

CONSIDERING the great popularity of the violin, and the important place which the stringed instruments played with a bow occupy in our orchestral scores, it is not surprising that occasionally attempts should have been made to trace the origin and early history of these instruments. Almost all our treatises on the ingenious construction and on the distinguished makers of the violin—and we possess now a considerable number of such publications—contain a discussion on its mediæval precursors. Unfortunately, however, most of these discussions are mere compilations repeating unfounded, or at least unascertained, statements of previous writers. The consequence is that erroneous notions are not unfrequently promulgated, and the progress in obtaining reliable information is more obstructed than promoted.

Much misunderstanding has been occasioned by the circumstance, very common during the middle ages, of the same name being applied in different centuries to different instruments. In most instances the misunderstanding might have been prevented if our musical historians had not omitted to state distinctly the period in which the instrument which they describe was in popular use. Indications such as "the middle ages," or "mediæval," are generally too vague to impart any satisfactory information. Considering that the middle ages comprise about a thousand years, from the fourth to the fifteenth century of our era, it might surely be surmised that the musical instruments of the earlier centuries must have been in many respects different from those of the later centuries.

The same remark applies also to the instruments of the most ancient nations of which we possess some historical records. Take, for instance, the Hebrews. Surely the musical performances patronised by King David differed considerably from those at the time of Moses; and, immediately after the death of David, King Solomon constructed new musical instruments, made of a foreign wood, and being regarded as improvements upon the previous ones. No doubt the musical progress of the Hebrews was slow, if compared with our own during the last five centuries. The art had not attained with them to the degree of cultivation which renders a rapid progress towards a higher degree of perfection possible. Besides, the almost exclusive employment of the most cultivated class of music in religious observances, which by their very nature were extremely conservative, must have retarded its progress, inasmuch as it rather prevented innovations in the construction of musical instruments as well as in the form of the musical compositions. Still, no people, however conservatively it may be disposed, can for a long period remain stationary and entirely uninfluenced by the notions and sentiments of other nations with which it happens to come into contact. Be this as it may, the usual attempt of our musical historians to explain the characteristics of the ancient Hebrew instruments from the representations on the Arch of Titus may reasonably provoke a smile, considering that the Arch of Titus was erected about fifteen hundred years after the time of Moses.

It may be objected that we do not possess sufficient records about the music of the nations of antiquity to scrutinise its stage of progress in different centuries. No doubt this is true enough, at any rate as regards the Hebrews, Egyptians, and Assyrians; hence our imperfect knowledge about their musical accomplishments.

At all events, in order to render the present researches as useful as is in my power, it appears to me necessary to state always with the evidences which I cite the centuries from which they date. Only in a few instances, where it is immaterial to know to which century of the middle ages the evidence recorded is to be assigned, I shall merely use the

term "mediæval." The reader, should he not agree with the conclusions I have drawn from the evidences, may therefore find this discussion nevertheless serviceable, inasmuch as it supplies him with a number of carefully selected authentic documents, from which he may form his own theory; true, they are too scanty to convey all the desirable information.

As regards the musical instruments of the early mediæval centuries, we possess scarcely any literary records; and respecting the later centuries, we have to consult poetical productions, which do not generally afford the most reliable evidence. No doubt the names of musical instruments were not unfrequently used rather indiscriminately by poets, just as is the case at the present day. Nor are the old records written in prose always more elucidating; yet, with the assistance of the representations to be found on sculptures and in paintings, it is possible to obtain a fairly accurate notion of the early mediæval instruments, especially as instruments similar to those which we find depicted are still in use in some countries. An acquaintance with the musical instruments of foreign nations in different stages of civilisation, extant at the present day, certainly facilitates these researches.

THE FIDDLE-BOW.

In describing the early precursors of the violin, I shall have to allude so frequently to the fiddle-bow, that it appears to me advisable, in order to prevent tedious repetitions, to give first a short sketch of the history of this ingenious invention as far as it is at present ascertainable. I purposely use the designation "fiddle-bow," because our violin-bow was, in its primitive condition, but a rude contrivance, and as such we have especially to regard it in the following investigation.

Probably the most primitive fiddle-bow was merely a long plectrum, or a feather, by means of which the friction was produced. On the Assyrian monuments in the British Museum are depicted some musicians, who vibrate the strings of a kind of horizontal harp by means of a long rod. From the position of the strings, it appears impossible that they could have struck them, as those of the dulcimer are struck; and, for twanging them, a short rod would have been much more convenient. It is therefore not improbable that this long rod was used to vibrate the strings by friction; perhaps it was for the purpose coated with some resinous substance.

By examining the productions in the arts of foreign contemporary nations which have not been affected by European influence, we may occasionally find a clue to the origin and use of certain similar productions by nations of antiquity. Thus, as regards the long plectrum, we may perhaps obtain a hint from the Japanese, who sound some of their stringed instruments with a wooden implement of considerable dimensions, which is broad at the top instead

of terminating with a point, and which might almost be regarded as constituting an intermediate contrivance between the plectrum and the fiddle-bow. Some of the plectra depicted with the ancient Greek and Roman instruments are likewise remarkably large, and must have been rather unsuitable for twanging. However, most of them are small, and pointed at the upper extremity; the same is the case with most of the plectra in use at the present day in different parts of the world. They are constructed of various substances, such as tortoise-shell, wood, ivory, leather, metal, feather, &c. A pointed piece of a quill is often used for the purpose; and this appears to have been also a common plectrum in ancient time. No doubt its elasticity and lightness render it especially suitable for twanging the strings. Perhaps these qualities sufficiently account for the preference given to quills also in the employment of the plectra in the spinet and harpsichord.

My object in noticing these facts is to show the probability that the fiddle-bow was gradually developed from the plectrum, notwithstanding the opinions to the contrary expressed by many of our learned musical historians. The Arabs in Egypt use a slip of an eagle's or vulture's feather to sound the strings of some of their instruments. If the strings of these instruments were of a substance the nature of which would permit the production of sound by the friction of a feather, it might naturally have suggested itself to the Arab musicians to use the whole feather. However, this conjecture would stand for little were it not supported by the following curious fact: B. Solvyns, of Calcutta, in his publication of coloured engravings with descriptions, entitled "The Costume of Hindustan" (London, 1804), gives an illustration representing a Hindu musician, who is playing a one-stringed sort of fiddle by means of a feather instead of a bow. The instrument, which is called *ooni*, is one of the most primitive contrivances imaginable, somewhat in the shape of a banjo. The feather is plumy, large, and slightly curved. The player, holding it in his right hand, draws it over the string of his fiddle, which he has placed before his breast in the usual oriental manner. To judge from his

scanty dress, he must be an inhabitant of a hot district; or perhaps he belongs to a caste which rejects the use of any clothing, except such as is urgently needed for decency's sake. The semi-circular shape given to the feather suggests the possibility that the friction is actually produced by a thin string fastened to both ends, which may have escaped the attention of the artist who drew the figure from nature. B. Solvyns states in the preface of his publication that his illustrations have been drawn in the Presidency of Bengal. It appears, therefore, not improbable that some European lover of music residing in that district might detect the feather-bow among the lower classes of the aborigines; and it is especially with the intention of inducing those who have the opportunity to investigate the matter that I have given a rather detailed description of the *virtuoso* with the feather-bow; although it is perhaps not likely that these remarks will become known to musical travellers in Hindustan.

We have seen that a string can be vibrated with the plectrum in three different ways. It may be twanged, struck, and rubbed.

The first-named method is the most usual, and is no doubt the oldest, since it is the easiest, and suggests itself most naturally. Before any plectrum was resorted to, the primitive and extremely rude stringed instruments were twanged merely with the finger. This statement is not founded on hasty conjecture: in examining the music of uncivilised and semi-civilised nations in different parts of the world, we obtain an insight into the gradual adoption of the various implements for vibrating the strings. Thus, we still find certain very rude instruments mounted with one or two strings, which are merely twanged with the forefinger. The Damaras, a wild Kafir tribe in south-western Africa, construct a musical instrument of the bow which they use in the chase and in war. This they effect by fastening in the middle of the string of the bow a leathern thong, whereby they tighten the string so much that, on being twanged, it produces distinct sounds.

Having no soundboard, or such like contrivance for in-

creasing the sonorousness, the earliest stringed instruments must have been, as regards quality of sound, poor and weak to the utmost degree. No doubt the players soon discovered that they could produce a somewhat louder tone by vibrating the string with a little piece of wood, cane, quill, or similar substance, instead of using the finger. This method of playing led ultimately to the construction of instruments provided with elastic quills and a keyboard, such as the spinet and harpsichord.

The method of vibrating the string by striking or beating it suggested the use of a plectrum differently shaped from the preceding one. It required to be longer, and heavier at the end which touches the string, instead of being lighter and pointed. This implement, which is still to be found with the instruments of the dulcimer family, gradually led to the construction of mechanisms with tangents and hammers; and thus originated the clavichord and the pianoforte.

Again, the method of vibrating the string by means of friction required a long and somewhat rough plectrum, and this simple contrivance was the poor ancestor of our glorious fiddle-bow.

In an attempt to trace the gradual development of the different methods of sounding the strings, consideration must be given to the influence which the cultivation of harmony, or a succession of chords, has evidently exercised upon the treatment of stringed instruments. No doubt, as long as melody, or a succession of single tones, prevailed—as is still the case in the music of most extra-European nations—the plectrum was a very suitable implement. But, when harmony came to be appreciated, twanging with the fingers, which was the earliest method, obtained again favour. By merely using his fingers, the player is enabled to select among the strings those which he requires for a chord, and to sound them simultaneously. This he cannot accomplish with a plectrum, even if there are no open strings intervening between those which he requires for the chord. Produced with a plectrum, the chord must necessarily consist of intervals obtained from strings which are placed together, and it

cannot be rendered otherwise than *arpeggio*, or in a rapid succession of tones.

No wonder, therefore, that the plectrum has fallen almost entirely into disuse with us, since our ancestors began to cultivate the combination of sounds which constitute harmony. On the other hand, the most ancient nations on record highly valued the plectrum; and, at the present day, most of the Asiatic races still retain it, since they find it especially suitable for the performances of the kind of instrumental music which is popular with them. The lute and the guitar of the Arabs are still, as formerly, played with a quill. After these instruments had been introduced into Europe, our forefathers, in order to render them convenient for the production of chords and harmonious combinations, increased the number of strings, and discarded the plectrum. The power of sound would thereby have been impaired, had not the construction of the frame and soundboard been at the same time so much improved as to permit a greater tension of the strings, and to produce an increased sonorousness.

Moreover, by twanging the strings with the tips of his fingers, the player is enabled to insure a more delicate expression and a fuller command over the different shades of loudness and accent than he possibly can do with a plectrum. Otherwise each finger might be provided with a small implement of this kind. Some Asiatic nations actually use a number of little plectra, formed somewhat in the shape of pointed thimbles, which they wear upon the fingers. For instance, the Arabs in playing the *kanoon*, and the Japanese in playing the *kin-goto*, have their fingers thus provided—not with the object of producing chords, but for eliciting a brisk quality of sound, and for facilitating the execution of peculiar flourishes and graces with which they are in the habit of embellishing their tunes. The Chinese sometimes make use of their long-grown nails for this purpose. Likewise, the ancient Irish minstrels sounded their harp (*clarsech*) with the nails of their fingers; and there is an old tradition on record about one of these fellows who, having committed some indiscretion, was punished by having

his finger-nails clipped off, so that he could not play until the natural plectra had grown again to the requisite length. The fleshy ends of the fingers would have been all the more inefficient since the Irish harp was strung with wire.

Furthermore, it requires to be observed that on certain instruments the finger is used as well as the plectrum, and both are not unfrequently occupied in twanging different strings at the same time. This mode of playing was evidently already cultivated by the nations of antiquity. Whoever has carefully examined the representations of musical performances on the Greek and Roman works of art cannot but have observed how the players on the lyre are often depicted having the left hand placed on some of the strings while they are sounding other strings with a plectrum held in the right hand. The usual explanation of our musical historians is that the player used his left hand for checking any undesirable continuous vibrations of certain strings which he had twanged with the plectrum. However, this explanation is probably incorrect. The sonorousness of the lyre was too feeble to require thus to be checked. More likely the player merely produced different qualities of sound and expression, viz., a brisk and loud one with the plectrum and a soft and subdued one with the finger. However, as this question does not especially refer to the history of the fiddle-bow, there is no necessity here for discussing it further. But I cannot omit the opportunity of drawing attention to the evidence which these representations afford respecting the employment of harmony, however imperfect, by the instrumental performers. In fact, the same treatment of the lyre is still adhered to by the Nubians and Abyssinians, who, on their *kissar* (the ancient *kithara*), sound some of the strings with a plectrum, while at the same time they produce a sort of soft drone accompaniment by sounding one of them with the finger.

At all events, the *pizzicato* obtained by means of the plectrum was certainly the most effective sound of the lyre, and of similar stringed instruments popular with the ancient nations, since the instrumental performances of antiquity

consisted almost entirely of accompaniments subservient to vocal recitations. Any implement contrived for producing the sound by friction would have been far less suitable for the purpose.

Even in our time, notwithstanding the facilities which we possess for recording inventions and discoveries, the origin of some of our new musical instruments is not exactly ascertainable, and may perhaps be a cause of dispute amongst musicians a thousand years hence. Take, for instance, the harmonium, which dates only from the beginning of the present century, and which now almost vies in popularity with the pianoforte. The chief characteristic in its construction—the free-reed—is now already regarded by many persons as being a new contrivance not older than the invention of the harmonium. It occurs, however, in the Chinese *cheng*, which was known as early as at the time of Confucius, five hundred years before the Christian era. Also the Jew's harp, with its vibrating tongue of metal, although it requires to be twanged, may be regarded as exhibiting the principle on which the harmonium is constructed. Our Jew's harp is also an old instrument; we possess illustrations of it in books dating from the beginning of the sixteenth century. Like this despised contrivance, thus also the rude fiddle-bow may have existed through centuries without being thought worthy of notice by the lovers of music. Indeed, even our highly perfected violin-bow is sufferable only in the hands of accomplished players. It is, therefore, not surprising that the primitive fiddle-bow should have been in use for centuries—nay, probably for some thousand years—without obtaining the same regard which was accorded to the plectrum. The ancient monuments usually represent historical events and religious ceremonies, in which only the superior and most esteemed instruments were played.

It is now usual with our musical historians to point to a Hindu origin of the fiddle-bow. According to a Hindu tradition, Ravanon, a mighty king of Ceylon, about five thousand years ago, invented a stringed instrument played with a bow, which is supposed to be the parent of the fiddle family. Besides, there are in Sanskrit the words *kôna*, *gâribâ*, and

parivâdas, which some scholars declare to designate the fiddle-bow, and which occur in literary productions said to be from fifteen hundred to two thousand years old.

Now, this may be true; still, it is likewise true that most of the Asiatic nations are gifted with a remarkably powerful imagination, which evidently induces them sometimes to assign a fabulously high age to any antiquity of theirs the origin of which dates back to a period where history merges in myth.

At the present day the Hindus possess, among their numerous rude instruments of the fiddle class, an extraordinarily primitive contrivance, which they believe to be the instrument invented by Ravanon, and which therefore bears the name *ravanastron*. Their opinion has actually been adopted by some of our modern musical historians as if it were a well-established truth.

The circumstance of the *ravanastron* being rudely constructed and having only one string is by no means an indication of its being of high antiquity. Probably it had originally a number of strings which were twanged. At all events, M. Sonnerat ("Voyage aux Indes Orientales," Paris, 1806, Vol. I., p. 182) gives an illustration of a four-stringed *ravanastron* which he declares is a representation of the instrument invented by Ravanon five thousand years ago. Moreover, the Hindus have several rude fiddles of this kind, such as the *cornì*, the *ruana*, the *omerti*, and the *koka*. A *koka* which is in my collection of musical instruments measures two feet in length, and its body consists of a species of nut, polished, with a belly of prepared skin. It has two small sound-holes at the bottom of the body, and is mounted with two thin wire strings. This instrument, which is from Bombay, closely resembles the *gunibry* of the Arabs in the Barbary States. The latter instrument is, however, played with a plectrum. Still, the *koka* may have been originally the *gunibry* introduced into Hindustan by the Arabs. Almost all the instruments of the Arabs and Persians are to be found in Hindustan.

The *koka* is also called *kinnere*, a designation which the Hindus use in association with several of their musical

instruments widely different in construction, and which appears to be the same term, as the Hebrew *kinnor* and the Greek *kinyra*. Very likely, as there are above twenty languages spoken in Hindustan, the designations *koka*, *oorni*, *omerti*, *ruana*, &c., may refer to the *ravanastron* constructed, with some modifications, by different tribes in different districts of the country, and best known to European musicians by the last-mentioned name. At all events, the *koka* exhibits all the characteristics assigned to the *ravanastron*, although it closely resembles the *gunibry* of the Arabs in the Barbary States.

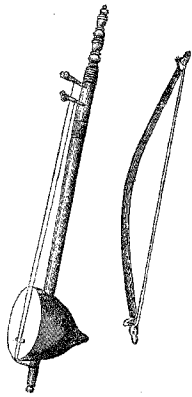


Fig. 1.—Koka : Hindustan.

Howbeit, it is not improbable that the fiddle-bow originated in India, and came thence to us through Persia and Arabia. Also the ancient Greeks and Romans may have had it. The circumstance that we do not know it to have been used in their musical performances, and that we do not find it depicted on their works of art is no decisive proof of their having been unacquainted with it. During a long period it must have been but a poor contrivance. It evidently was originally rather despised by the Arabs, to judge from the meaning of *rebab*, "producing melancholy sounds." If the Greeks and Romans regarded the music produced by the friction of the bow in the same light as did the Arabs, they may have preferred to twang the strings of their popular instruments, and to ignore the bow altogether in their musical treatises and in their artistic representations of musical performers.

The designation of the common Arabic fiddle, *rebab*, is supposed to be derived from the Persian word *revâveh*,

"emitting plaintive sounds." There are several varieties of this instrument. Moreover, the Arabs have another instrument played with a bow, called *kemangeh*. The name is Persian, and signifies "crooked" or "arched." The *kemangeh* probably derived its name from the bow with which it is played. We do not possess any decisive evidence as to the *kemangeh* being of the same antiquity as is the *rebab*. If, as we find it recorded, the Arabs, when they invaded Persia with the object of promulgating their Mohammedan faith, in the seventh century of our era, adopted the musical system of the conquered people, because they found that the Persians had already attained a higher degree of musical cultivation than the Arabs, it is very likely that the latter obtained their fiddle-bow from the Persians, especially as the name for it is derived from the Persian language.

The Chinese probably received it from India in the second or third century of our era. There is no sort of fiddle mentioned among the musical instruments which were in use in China at the time of Confucius, about five hundred years before Christ, and which are alluded to in the Chinese sacred books recording the teachings and adventures of Confucius and his disciples. The Buddhist religion originated in India. It spread into China during the first century of our era. According to some modern *savants*, eighteen Buddhistic emissaries reached China as early as two hundred and fifty years before our Christian era; and these men, it is stated, are held in remembrance to the present day, their images occupying a conspicuous place in every Buddhist temple of any pretension. As we possess, however, no evidence of their having in any way reformed the Chinese sacred music, and as it appears indeed doubtful whether they brought their musical instruments with them, it will be safer for musical inquirers to assume the effective influence upon the Chinese sacred music by the Buddhist religion as commencing about the time of the origin of our Christian religion. Soon after this event, the Chinese probably obtained from India several of their present stringed instruments provided with a neck and frets, unknown to them at the time of Confucius, and also their curious fiddle, called *urheen*. Subsequently, the

Chinese communicated the bow to the Japanese, who have a fiddle called *kokiu*.

We may observe here an unmistakeable instance of the bow having been adopted with an instrument the strings of which were previously twanged. The Japanese *kokiu* closely resembles the Japanese *samsien*, which is played with a plectrum; the only difference being that the *samsien* is of larger dimensions, and that it has three strings, while the *kokiu* has four strings. Thus also, in China, the *sanheen*, mounted with three strings, which are twanged, has evidently suggested the construction of a four-stringed fiddle called *wooqu*, which is a decided improvement upon the primitive *urheen*. The Japanese *samsien* was evidently originally the same instrument as the Chinese *sanheen*.

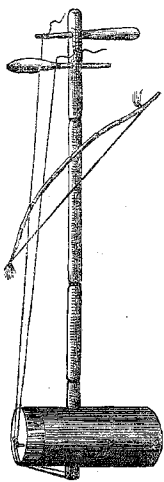


Fig. 2. Urheen: China.

The correctness of these statements is ascertainable from circumstantial evidence, which to enumerate here would take too much space. However, by way of example, one or two facts, suggesting the derivation of the *urheen* from India, may be mentioned.

With the most ancient nations of which we possess historical records, certain musical instruments were intimately associated with religious ceremonies. This may be gathered, for instance, from the Assyrian sculptures. All the Hebrew instruments known to us from the Old Testament were used in sacred observances. The new musical instruments met with in China after the introduction of the Buddhist religion closely resemble certain instruments which are popular in India, where the Buddhist religion originated, and in some other Asiatic countries

where it is still flourishing. The Kalmuks, in the south of Russia, who are Buddhists, possess a rude fiddle which in shape and construction is identical with the Chinese *urheen*. Furthermore, the Kalmuks adore a musical deity called Maidari, who is represented playing on a stringed instrument, almost precisely like a certain musical idol found in the Buddhist temples in China. These evidences point to a common source in Hindustan.

Attention must be drawn to certain coincidences in the construction of some of the Asiatic instruments played with a bow and in that of our violin. It is, indeed, difficult to believe that the coincidences are accidental; nor does it seem at all probable that the instruments have been introduced into Asia from Europe. Let us examine one or two suggestive similarities.

We have seen that the shape of the Chinese *urheen* bears no resemblance to our violin. Its body consists of a cylinder covered at the top with snake-skin, and the number of its strings is generally restricted to two. The strings, made of twisted silk, are placed so far distant from the neck of the instrument as to render it impossible for the player to press them down for the production of different tones. In short, the *urheen* must be classed with the most primitive attempts at constructing an instrument of the violin family. The *woopu* exhibits a great improvement upon it, since the small body of the *woopu* is pear-shaped, slightly incurved at the sides, and mounted with four strings, which are placed closely over the neck so as to enable the player to shorten them at pleasure with his fingers.

The Japanese *kokiu*, of which an illustration is here given (Fig. 3), is likewise four-stringed; however, its body, which consists of a square-shaped wooden frame, covered at the top and at the back with parchment, does not bear the slightest resemblance in shape to the violin. Its strings are of silk, neatly twisted and rubbed with some resinous substance.

Turning to Hindustan, we find, among the numerous instruments played with a bow, which are popular in that country, several which rather resemble our violin. Nay, it is well known that in some of the seaport towns of Hindu-

stan the European violin has actually been introduced, although it does not appear to have obtained much popular favour. The rajahs seem not to appreciate its really commendable qualities, to judge from the fact of their having ordered violins to be manufactured of silver instead of wood. Some specimens made of this precious metal have found their way to London. One of them, dating from the year 1781, was sent to the Special Exhibition of Ancient Musical Instruments, held in the South Kensington Museum in the

Fig. 3. Kokiu: Japan.

year 1872. Its body was entirely of silver, and it had been made at Cawnpore, in imitation of an Amati violin. Considering that it was a hundred years old, the reader may perhaps be inclined to conjecture that our violin has suggested some of the forms in the Hindu instruments played with a bow which remind us of our own instrument. There is, however, no satisfactory reason for this supposition; on the contrary, a closer examination rather leads to the surmise that also here the European nations may have taken a hint

from the Asiatic nations. As this question is of some importance to the musical historian, I shall briefly notice a few facts in support of the opinion which deserve further investigation.

We have seen that the Hindus are not entirely unacquainted with the European violin. They call it *bahulin* (perhaps a corruption of *violin*), and there is now in Calcutta a Musical Academy, founded in the year 1871 by the Rajah Sourindro Mohun Tagore, in which this instrument is actually taught; so that ere long we may perhaps expect in our public concerts a Hindu *virtuoso* astonishing his auditory with the performance of some of our brilliant violin compositions. However this may be, it can hardly be said that this European introduction has affected in the slightest degree the spirit of the Hindu national music, or the characteristics of the genuine Hindu stringed instruments played with a bow. I shall notice only one of the latter, which, whatever its age may be, is evidently a very old contrivance, though it may have been somewhat altered in the course of time. I am alluding to the *sarinda*, of which the annexed engraving shows at a glance a certain resemblance with the violin more clearly than a long description would probably accomplish. Suffice it to remark that the *sarinda* is made of a single block of a brown wood, hollowed, and ornamented with carving; that the belly is partially open, the lower part only being covered with skin resembling bladder, generally from a species of gazelle; and that the top of its

Fig. 4.—Sarinda, Hindustan.

neck is not unfrequently carved in the shape of a bird. Moreover, the *sarinda* has three strings of silk, or of catgut, the latter material being now more ordinarily used than silk. There are some other Hindu stringed instruments played with a bow which bear a still closer resemblance to the violin; but, as the *sarinda* is especially popular, and is chiefly played by the lower castes, it may be supposed to have been longer in use than those adverted to, and for this reason it is here mentioned in preference to others.

The incurvations at the sides may naturally have suggested themselves for facilitating the management of the bow. The frequent use of sympathetic strings on the Hindu instruments of the fiddle class is perhaps more suggestive. The reader must be reminded that European nations had also formerly this contrivance, thin metal strings being placed beneath the catgut strings in order to increase the sonorousness by softly vibrating sympathetically when the catgut strings were struck with the bow. Of this kind of our antiquated fiddles was, for instance, the *viola d'amore*. Although now fallen into disuse in most European countries, the contrivance of employing sympathetic strings has not been entirely abandoned. For instance, the peasants in some districts of Norway construct a fiddle, known as the *hardangerfelen*, which exhibits this peculiarity. The Arabs likewise use sympathetic strings on some of their instruments played with a bow.

Furthermore, I must not omit to draw attention to the suggestive resemblance of the soundholes on some of the Arabic and Persian stringed instruments with those of our violin family. Take, for instance, the shape and position of the two soundholes on the three-stringed *rebab* represented on page 85. No doubt the reader is aware that our immediate precursors of the violin had similar crescent-shaped soundholes; but also shapes resembling the *ff* holes are occasionally to be met with on Asiatic instruments. The Chinese and Japanese stringed instruments have generally no sound-holes on the belly; nevertheless, it is not unusual with the Chinese to paint on the soundboards of their *pepa* and their *yue-kin* two designs which remind us of

the two sound-holes of the violin. The Chinese stringed instruments are generally of plain wood, neither painted nor lacquered, because these additions are thought to be injurious to the sonorousness. Those of the Japanese are often lacquered, and also here, as has been intimated, two sound-holes are sometimes merely painted upon them, without their being pierced into the sound-board. What can be the origin and object of this fancy?

Again, our antiquated viols had frequently a single circular soundhole placed in the centre, as is the case with the guitar. This soundhole was usually ornamented with a so-called rose, consisting of an elaborately and tastefully carved design. The designation "rose" it perhaps obtained from its resemblance with the circular window having compartments of tracery branching from a centre, and called in architecture a rose-window. The lutes of our forefathers were often beautifully embellished with these designs. But, there can be no doubt that the ornamentation is of Asiatic origin. On referring to the engraving of the two-stringed *rebab* on page 84, the reader will observe that the instrument is perforated with three roses. The Arabs may have adopted this contrivance from the Persians, from whom they appear to have borrowed, as I shall presently endeavour to show, several of their instruments played with a bow. As regards the Persians, there are indications—which it would lead too far here to point out—suggesting that they obtained several of their instruments from the Hindus. However this may be, the Arab-Persian instruments which we find at the present day in Hindustan have evidently been introduced into that country since about A.D. 1000, when the Arab irruption commenced.

Without further indulging in these speculations, which deserve careful regard by inquirers who desire to trace the ancient connection of our instruments played with a bow with those of Asiatic nations, I cannot refrain from noticing one more Asiatic fiddle, which, as far as I am aware, approaches our violin in form more closely than does any Hindu instrument. I am alluding to the *thro* of the Burmese, of which an illustration is here given. The *thro* is mounted

with three strings of twisted silk. It measures about two feet and a half in length. Its head, instead of having a scroll, is generally elaborately carved. At a first glance, it would appear that the Burmese constructed this instrument after a model of a European violin; there is, however, no evidence in support of this conjecture—on the contrary, Michael Symes (Embassy to Ava in the year 1795) expressly records: "I at first imagined it had been of European introduction, and brought to Pegu by the Portuguese; but I was assured that it is an original instrument of the country." Moreover, its name appears to have been derived from the same root which is traceable in the names of several Hindu instruments. This root is the Sanskrit word *sarva*, signifying "entire" or "universal," which is to be found in the Burmese *thro* and *savoh* as well as in the Hindu *sarungi*, *sarinda*, *sarrooda*, *saymundal*, &c.

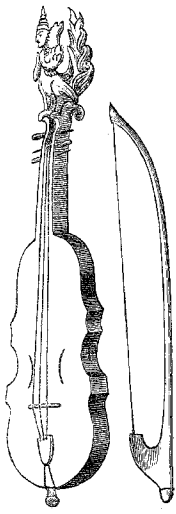


Fig. 5. Thro: Burmah.

The only oriental instrument played with a bow to which, in my opinion, ought to be assigned a European origin, is to be found with the Arabs in Egypt. They call it *kemangeh-rouny* (i.e., "Greek viol"), which suggests that they obtained it from Greece. However, there is no reason to assign to it a high antiquity; on the contrary, its shape and construction rather point to our *viola d'amore* as its parent. The *kemangeh-rouny* certainly bears a strong likeness to our violin. It is generally mounted with six catgut strings, and with six sympathetic strings of thin

wire which are placed beneath the former. Its accordatura is thus:—

There are varieties of this instrument in use in Turkey, and by some of the tribes in Caucasia.

The fiddle-bow has experienced so many alterations, in the course of time that an account of them would require much space. As the discussion would probably interest but a few ardent antiquaries, the following remarks only are offered.

Most of the bows used by Asiatic nations are contrived so that the tension is fixed. They are, indeed, but poor relations of our violin-bow. Those used by the Hindus are generally less curved than those of most other Asiatic nations; but they are often extremely rude, the hair being drawn through a hole at the upper end of the stick, and secured by a knot, and being fastened at the lower end of the stick by means of a little band, which is simply wound round the wood. The bow of the Chinese *urheen* is nearly semi-circular and of a very rude construction, consisting of a cane bent by horsehair, which is fastened to each end. The bow of the Japanese *kokiu* exhibits an improvement, inasmuch as the tension can be increased or slackened by means of a cord which is attached to the lower end of the horsehair, and is wound round the stick. The bow of the *rebab* constructed by the Arab-Egyptians has generally an iron ring at the lower end of the stick, to which the hair is attached, so that it can be tightened or slackened by means of a band of leather. Probably the bow of the *rebab* brought to Europe by the Arabs was not more ingeniously constructed. At any rate, that of the *rebab* used at the present day by the Arab descendants in Morocco is such a simple contrivance; however, it is semi-circular in shape, and is not unfrequently embellished with some incisions and designs in colour.

The hair used for the bow by most of the extra-European nations is black horsehair. This colour is probably preferred

because the black hair is generally thicker and rougher than the white, and, therefore, produces a greater friction. It is also used for our double-bass bow, while for the delicate treatment of the violin white hair is preferred.

Fig. 6.—Bow of the Kokiu; Japan.

It is remarkable that, while the strings of the instruments made in different parts of the world are of every possible substance (such as gut of the sheep, goat, cat, calf, camel, silk, metal, hair, the runners of creeping plants, the fibrous bark of trees, the tendons of animals, &c.), the substance of the bow is apparently always the same. Possibly the hair of the bows of some foreign nations may be from other animals than the horse, but it certainly appears to be horse-hair.

The shape of the bow of the German fiddle assigned to the ninth century, which is depicted in Gerbert's "De Cantu et Musica Sacra," rather resembles that of our old-fashioned double-bass bow. However, it appears doubtful whether the manuscript from which the illustration has been copied is really so old as is generally supposed. A bow depicted in Notker's Psalm-book, of the tenth century, is more curved. The same is the case with an Anglo-Saxon bow of the eleventh century, depicted in a manuscript which is in the British Museum.

In fact, our fiddle-bow has been brought only at a comparatively recent period to the degree of perfection which it now exhibits. The screw and button, by means of which the tension of the hair can be regulated, are said to have been first adopted in the beginning of the eighteenth century by Tourte, in Paris, the father of the celebrated violin-bow maker, François Tourte.

Before this contrivance was invented, the tightening and slackening of the bow was effected by means of a little rack of wood or metal; and, before this improvement came into use, the tension was unalterable. The viol-bows were generally rather short and much curved. The so-called Corelli bow, with its peculiarly pointed top, represents one of the latest forms in use before the adoption of the present one. But this is probably known to the reader.

I shall presently endeavour to show how, in European countries, the bow became gradually to be used with certain instruments, the strings of which were previously twanged.

THE CRWTH.

Most of our musical historians regard the Welsh *Crwth* as the oldest European instrument played with a bow. In support of their opinion they cite a poem in Latin by Venantius Fortunatus, a bishop who lived in the second half of the sixth century at Poitou (Poictiers, in France), and who was a native of Lombardy.

As I shall have to refer, in the course of the present investigation, to this curious document, I shall insert it here. The bishop says:—

Romanesque lyra, plaudat tibi Barbarus harpa, Græcus Achilliaca, Chrotta Britanna canat.

This verse occurs in one of the odes which were published in the year 1617, under the title "Venantii Fortunati Poemata," and it has been often quoted by musical historians rendered thus:—

Let the Romans applaud thee with the lyre, the Barbarians with the harp, the Greeks with the cithara; let the British crowd sing.

The chief object of these writers is to show that the *chrotta* mentioned by Venantius Fortunatus was the Welsh *crwth*, or the British *crowd*, played with a bow. Some patriotic Welshmen go even further than this; they find in the expression "chrotta Britanna canat" a proof that the music of their forefathers more than a thousand years ago was superior to that of other European nations, for they are said to "sing" on their instrument, which implies that they played sweetly and impressively, while other nations only harped in the ordinary way. Some continental writers translate the suggestive passage less complimentary to the

old Britons. For instance, Fétis, in his "Histoire Générale de la Musique," Vol. iv., p. 344, renders it thus:—

Le Romain t'applaudit sur la lyre, le Grec te chante avec la cithare, le Barbare avec la harpe, et le crouth Breton.

Hyacinth Abele, in his little book on the violin, gives it in German, as follows:—

Der Römer lobt dich auf der Leier, der Barbar singt dir mit der Harfe, der Grieche mit der Cyther, der Britannier mit der Crouth.

(The Roman praises thee with the lyre, the Barbarian sings to thee with the harp, the Greek with the cyther, the Britain with the crwth.)

It is immaterial which of these versions the reader prefers, since, even if it could be proved that the old Britons were the best musicians in the world, it would throw no light upon the subject of our inquiry; suffice it to know that the *chrotta* alluded to is believed to be the same instrument as the Welsh *crwth*.

The opinion of the commentators is probably correct, if we take the *crwth* as it was when Venantius Fortunatus wrote those lines, and not as we are acquainted with it from a specimen or two which were constructed about a thousand years later.

Although the latter *crwth* may be supposed to be known to most English musicians, it appears to me advisable to give a short account of the instrument in order to guard against misunderstanding in the following statements respecting the history of the mediæval instruments played with a bow.

The *crwth* is generally regarded as a very old national musical instrument of the Welsh people. It has now fallen into oblivion. There were still some players on it met with in Wales during the eighteenth century. In the year 1776, when Sir John Hawkins published his "History of Music," there was still a Welshman living in the Isle of Anglesey, who understood how to play it according to the transmitted rule, and whose performances attracted the attention of some English travellers of an antiquarian turn of mind. He was an old man, and appears to have had no successor in this accomplishment.

Sir John Hawkins (History of Music, Vol. ii., Book III., Chap. 3) gives a description and illustration of the *crwth*, with which the reader may be supposed to be acquainted. Moreover, some specimens of this instrument have been preserved, and as I have succeeded in procuring one for my collection of musical instruments, I am able to give a description of the *crwth* from personal observation.

My specimen is of an oblong square shape, and its dimensions are: length, 22 inches; width, $9\frac{1}{2}$ inches; depth, 2 inches; length of the finger-board, $10\frac{1}{8}$ inches. The body is scooped out of a single block of wood, except the belly, which is glued on. It has two circular sound holes. The bridge, which is remarkably flat, is placed in a somewhat oblique direction, resting with one foot on the inside of the back of the instrument, the foot being placed through one of the sound holes. The instrument is mounted with six catgut strings, four of which rest on the bridge, and two run by the side of the bridge. The latter are those which are tuned in *g* with its octave, as shown in the following notation:—

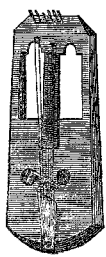
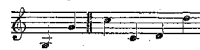
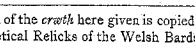


Fig. 7. Crwth: eighteenth century; Wales.*



Thus were the strings of the *crwth* tuned during the eighteenth century, and perhaps the same arrangement may have prevailed at an earlier period. William Bingley ("A Tour round North Wales," Vol. ii., p. 332, London, 1804) relates that in the year 1801 he met with a Welshman at Carnarvon, who played some national airs of his country on a *crwth* which he had tuned thus:—



* The woodcut of the *crwth* here given is copied from Edward Jones's "Musical and Poetical Relicks of the Welsh Bards." (London, 1794.)

Perhaps the proper arrangement of the intervals on the instrument had already fallen into oblivion, and the player merely tuned the strings according to his own fancy. However this may be, the former notation is generally supposed to exhibit the old arrangement. Only the four strings resting on the bridge were usually vibrated with the bow; those at the side of the bridge were twanged with the thumb of the left hand. The shallowness of the bridge renders it almost impossible to apply the bow to a single string; nor seems this to have been intended, to surmise from the succession of the strings in octaves, which suggests that two should be sounded together. Also the contrivance of reversing the octaves of the strings on the bridge, as shown in the older notation, may thus be accounted for, since it enables the player to sound the higher octave of each tone more prominently than would otherwise be possible. Of course, the difficulty of vibrating each string separately with the bow might have been obviated by adopting a more circular bridge; but, in that case, the bow would have come into frequent contact with the sides of the instrument, which have no incurvations. This appears to me noteworthy, inasmuch as it indicates that the *crwth* was not originally intended to be played with a bow, but that all its strings were twanged, just as was still the case with two of them during the eighteenth century.

Unfortunately we possess no early representation of the Welsh *crwth*. The illustration given in Hawkins's "History of Music" exhibits all the same characteristics which have been noticed in the description of my specimen, the only difference being that the tuning-screws of the latter are of iron, and in shape not unlike those of the harpischord and pianoforte, while in the illustration alluded to they are in the shape of the letter T, and probably represent tuning-pegs made of wood. This is noteworthy, on account of the resemblance of these pegs with those in common use on the stringed instruments of the Arabs.

Again, there is an illustration of a *crwth* in "Archæologia; or, Miscellaneous Tracts relating to Antiquity," Vol. iii. (London, 1775), with a description of the instrument by Daines

Barrington. The strings are exhibited as drawn through little holes at the top of the neck and fastened at the back of the head, precisely as they are on the Persian *rebab* in my possession. In fact, this contrivance is very common on the instruments of the Arabs, Persians, and Hindus. Furthermore, the contrivance of placing one foot of the bridge through the sound-hole, in order to cause the pressure of the strings to be resisted by the back of the instrument instead of by the belly, is not so extraordinary and peculiar to the *crwth* as most writers on Welsh music maintain. It may be seen on certain oriental instruments of the fiddle kind, which are not provided with a soundpost. For instance, the bridge is thus placed on the three-stringed fiddle of the modern Greeks, which is only a variety of the ordinary *rebab*, but which the Greeks call *lyra*. Inappropriate as the latter designation may appear, it is suggestive, inasmuch as it points to the ancient lyre as the progenitor of the fiddle.

Before scrutinising the early history of the *crwth*, it will be advisable to ascertain the meaning of its name as it is explained in the dictionaries of the Welsh language.

William Richards ("Welsh Dictionary," London, 1798; new edition, Carmarthen, 1828-32) defines the *crwth* as "a musical instrument called a croud, a fiddle; from the Greek *choros* (a dance) and *kitharis* (a harp). *Crwth halen*, a salt-box. *Crythor*, one that plays upon a croud, a fiddler."

Spurrell ("Welsh Dictionary") has: "*Crwth* (plural *crythau*), anything swelling out; a bulge, a trunk, a belly; a crowd, a violin."

Thus also William Owen ("A Dictionary of the Welsh Language," London, 1803): "*Crwth* (pl. *crythau*), any body swelling out; a bulging, a paunch; a kind of box scooped out of a piece of wood and rounded, except on the sides where the excavation is made, which is flat, and covered with a board ending in a tail to hang it up by, when it appears much like a bottle, having a hole on the upper part of the rotundity, through which it is filled. It is used mostly to hold salt, and hence a salt-box of any form is called *crwth halen*. Also a musical instrument with six strings, the two lowest of which are drones struck by the thumb, whilst the

others are touched with a bow. It is much on the same principle with the violin, of which, perhaps, it is the prototype, and the term is now indiscriminately used for both."

Likewise Edward Jones, in his "Musical and Poetical Relicks of the Welsh Bards" (London, 1794), remarks that the *crwth* derived its name from "its protuberant or bellying form." If this was the case, its back must have been originally convex, and the *crwth* of the eighteenth century, of which some specimens have been preserved, does not represent exactly the original shape of the instrument. In fact, the convex body must have constituted the chief feature of the *crwth*, if it derived its name therefrom. Also R. A. Armstrong ("Gaelic Dictionary," London, 1825) supports this conjecture by defining the original meaning of *cruit* as "a hump on the back," and *cruitear* as "a hump-backed person." No doubt the flat back was later adopted, when it became the fashion to use the bow to four of the strings instead of twanging them, and when it was found more convenient to place the instrument on a table instead of holding it in the hand.

Fig. 8.—Ancient Oriental Lyre.

Notwithstanding this innovation, the *crwth* bears a striking resemblance to the oriental lyre, which before our Christian era was a favourite instrument with the Egyptians, Greeks, and several other eastern nations. A comparison of the *crwth* with the ancient lyre depicted here, which is copied from an Egyptian painting, will probably convince the reader that the two instruments are almost identical in outward appearance, the only noteworthy difference being the addition of a finger-board in the *crwth*; and this construction is explicable as a comparatively modern contrivance. The

painting on which this lyre occurs is supposed by Sir Gardner Wilkinson, and by some other Egyptologists, to represent Jews bringing tribute to the Pharaoh Osirtasen I., at the time of Joseph; while other scholars assert that these strangers, bearded and peculiarly dressed, are meant for Jebusites, who lived in Jerusalem with the Hebrews, by whom they had been subdued. At any rate, it hardly admits of a doubt that the Hebrews, about the time of King David, also possessed this species of lyre, carried horizontally by the player, considering that it is to be found represented on the Assyrian monuments as well as on those of the Egyptians and other nations of antiquity. The circumstance of its being generally more simple and plain than the upright lyre, which the player held before him in a perpendicular direction, rather indicates that it is the older kind; and this conjecture is, as we shall presently see, in conformity with popular tradition. However, the illustration does not exactly exhibit the earliest form of the body of the lyre, since the back must have been oval, if it consisted of the shell of a tortoise. At all events, the remarkable resemblance suggests that the old *crwth* was the imported oriental lyre; and this conjecture is further supported by the following statements referring to the Irish *cruit* and the English *crowd*.

In a learned work by Edward Lhuyd on the comparative etymology of the early languages of Great Britain, published at Oxford in 1707, we find, under the heading *Cithara* (Greek): "Welsh, *telyn; krûth*, a croud; Cornish, *kroud*, a fiddle, a violin, and *telein* (obsolete), a harp; Irish, *kruith, clairseax*."

In Edward Lhuyd's Irish-English Dictionary are given the following definitions: "*Cruit*, a bunch on the back; *cruiteog*, a woman crowder, or that playeth on the violin; *cruith*, a croud, a violin; *cruitin*, crook-backed; *cruiteneach*, crump-shouldered; *cruitire*, a crowder."

Some scholars make a distinction in the spelling, adopting *cruit* for a fiddle and *cruith* for a harp; others maintain that *cruit* designates any stringed instrument without exception.

Edward Bunting, in his dissertation on the Irish harp, prefacing his "Collection of the Ancient Music of Ireland,"

Vol. i., p. 23 (London, 1809), remarks that "*cruit*, or *croith*, signifies a trembling motion."

Joseph Walker ("Historical Memoirs of the Irish Bards," p. 73, London, 1786) mentions the *cionar cruit*, which, he says, "had ten strings, and was played on with a bow or plectrum. As no drawing of this instrument has reached us, we can only suppose it resembled the *hashur* [*asor*] of the Hebrews, of which such frequent mention is made in the Psalms by the name of the 'ten-stringed instrument.' . . . In the *cionar cruit* we have the *canora cythara* of the Latins of the middle ages, and the origin of the modern guitar." This is, of course, incorrect. There was no particular instrument which was called *canora cythara;* and our modern guitar is known to be of Arabic origin.

Furthermore, J. Walker mentions the old Irish *creamthine cruit*, with the remark that it was identical with the *crwth* of the Welsh. "It was called *creamthine cruit*," he explains, "because it was used at potations or carousals; whence *cream-nual*, designating a noisy, drunken company." He calls it the parent of the violin, and assigns to it an Irish origin, remarking of the Welsh people: "In fact, two of their own historians confess that Gruffydh ap Conan brought it over into Wales from Ireland." Later he says: "But the Welsh are not the only people who, we imagine, borrowed the *crwth* from the Irish. Our neighbours, the Scots, were in all probability under the same obligation to us, though a trace of that instrument cannot be found in any of their historians. The ingenious and learned Barrington informs us that there is a representation of the instrument which bears an exact resemblance to the Welsh *crwth* amongst the outside ornaments of the Abbey of Melrose, in Scotland, which, to the best of his recollection, is supposed to have been built about the time of Edward II. From an inscription on this abbey (which was founded A.D. 1136) it appears that the architect was a Parisian, who, it is natural to suppose, borrowed his ornaments from his own country."

An illustration of the supposed *crwth* in Melrose Abbey, published by Sir John Graham Dalyell, in his "Musical Memoirs of Scotland," Plate XXIX. (Edinburgh, 1849),

exhibits an instrument which appears to be rather a kind of viol. The sculpture is evidently in too dilapidated a condition to convey a clear impression of the original shape of the instrument.

As might perhaps be expected, the time when the *crwth* began to interest intelligent foreigners is not remote. The earliest mention of it by English antiquaries occurs, as far as is known, in John Leland's "Collectanea," dating from the sixteenth century, which is noticed in Vol. ii. of Hawkins's "History of Music." Edward Jones, notwithstanding his anxiety to claim for the Welsh instruments the highest antiquity, cannot give any distinct evidence of the use of the bow with the *crwth* earlier than about four centuries ago. He mentions, however ("Musical and Poetical Relicks of the Welsh Bards," p. 116, London, 1794), a species of fiddle, called *crwth trithant* (three-stringed *crwth*), which was, he explains, "a sort of violin, or, more properly, a *rebec*," and which anteceded the six-stringed *crwth*. The *crwth trithant* was evidently the more popular of the two instruments, since it was usually played by the ordinary minstrels, while the six-stringed *crwth* was confined to the superior class of bards.

It admits hardly of a doubt that the *crwth trithant* was the mediæval *rebec*, derived from the *rebab* of the Arabs, and that this instrument suggested to the Welsh the employment of the bow on their old *crwth*, the strings of which were previously twanged. At all events, the *rebab* of the Arabs has led to the adoption of the bow on several other stringed instruments, in use in different European countries, the strings of which were originally twanged; and indications are not wanting which lead to the conclusion that precisely the same must have happened with the *crwth*.

Edward Jones is unable to produce an earlier authentic record of the existence of the *crwth* in Wales than the mention of it in a poem of the fifteenth century; and even this date has not been satisfactorily ascertained, to judge from his remark ("Musical and Poetical Relicks of the Welsh Bards," p. 115, London, 1794): "It seems to be a production of the fifteenth century." The name of its author

was Gruffydd ab Davydd ab Howel. As this poem contains a minute description of the *crwth* as it was constructed about four hundred years ago, I shall insert it here in Welsh as well as in the English translation given by Edward Jones: this will enable inquirers conversant with the Welsh language to compare the translation with the original:—

Prennol tèg bŵa a gwregis,
Pont a brân, punt yw ei brîs;
A thalaith ar waith olwyn,
A'r bwa ar draws byr ei drwyn,
Ac o'i ganol mae dolen,
A gwâr hwn megis gŵr hên;
Ac ar ei vrest gywair vrîg,
O'r Masarn vo geir Miwsig.
Chwe yspigod o's codwn,
A dynna holl dannau hwn;
Chwe' thant a gaed o vantais,
Ac yn y llaw yn gan llais;
Tant i bôb bŷs ysbys oedd,
A dau-dant i'r vawd ydoedd.

(A fair coffer with a bow, a girdle,
A finger-board, and a bridge; its value is a pound;
It has a frontlet formed like a wheel,
With the short-nosed bow across;
And from its centre it winds in a ring;
And the bulging of its back is somewhat like an old man;
And on its breast harmony reigns:
From the sycamore music will be obtained.
Six pegs, if we screw them,
Will tighten all the chords;
Six strings advantageously are found,
Which in the hand produce a hundred sounds:
A string for every finger is distinctly seen,
And also two strings for the thumb.)

Without the slightest inclination to dispute the existence of the fiddle-bow with the *crwth* in the fifteenth century, it appears by no means certain to the unbiassed inquirer that it is alluded to in the above description of the instrument. The bow which is mentioned may possibly refer to the curved shape of the frame, which in the older *crwth* appears to have been somewhat different from that of the *crwth* of the eighteenth century which is known to us.

Be this as it may, I think I shall be able to convince the reader, by statements of well-ascertained facts, that the usual assertion as to the *crwth* being the oldest instrument of the violin kind has no foundation whatever, and would probably long since have been confuted were it less the practice of musical authors to compile without investigation and to dictate without knowledge. Sure enough, in Wales they found a curious sort of fiddle, said by the natives to have been in use with them from time immemorial, as people always say when they possess something peculiar, the origin of which they are unable to trace. The supposed high antiquity enhances to the people the value of their relic, especially if they find it admired by foreigners and learned antiquaries.

As regards the allusions to the *crwth* by Welsh bards and minstrels, asserted to date from the sixth century, and mentioned by several musical archæologists, I think I am justified in rejecting this evidence on the authority of distinguished modern writers on Welsh literature. Take, for instance, the following statements:—

D. W. Nash, in his interesting work entitled "Taliesin; or, Bards and Druids of Britain," p. 340 (London, 1863), remarks: "The Welsh minstrelsy, instead of dating from a time beyond the limits of history, or deriving its materials from a source hidden in the obscurity of a pre-historic age, enters the circle of the romantic literature of Europe during the tenth and succeeding centuries, and will probably be found to have received more from than it communicated to its continental neighbours."

A. H. Sayce ("Introduction to the Science of Language," Vol. ii., p. 86, London, 1880) remarks: "Excepting glosses of the eighth century and a few inscriptions of still earlier date, Welsh literature begins with the revival in the eleventh century, when such of the older poems as had been preserved were modernised in language, and a large number of additions were made to them and ascribed to the traditional names of Aneurin, Taliesin, and other bards. The best part of the literature belongs to the next two centuries, when, among other productions, the 'Triads' and a number of chronicles were composed."

Thomas Wright, in his "Essays on Archæological Subjects," Vol. ii., p. 159 (London, 1861), says: "The Welsh claim to a series of vernacular poets, under such names as Aneurin, Taliesin, and Merlin, who are asserted to have lived in the sixth century, and others belonging to ages immediately succeeding; and they show us what are asserted to be their genuine compositions, and which present, strangely enough, a system of perfect rhymes and of the different forms of versification exactly like those which, after a long and laborious course of formation, are only first found in French poetry in the twelfth century. This is certainly a very startling circumstance, and one which may well lead us to hesitate in accepting these Welsh poems of which I am speaking as authentic. . . . Among the poetry attributed to the supposed early Welsh bards, there is much, such as the love for riddles and for enigmatical expressions, and for a particular class of didactic poetry, which has its close resemblance in the Anglo-Saxon literature of the tenth and eleventh centuries, and which was, I think, borrowed from it in the same way that much of the rest was borrowed from the Anglo-Norman of a later date. The Welsh had no doubt abundance of traditions and legends as mythic as those of the Anglo-Saxons. In the twelfth and thirteenth centuries they were just in that political condition when men look back with eagerness to a supposed former glory, and love to exaggerate the supposed exploits of their ancestors, and when they readily mistake their mythical legends for historical ones. . . . Mr. Nash has pointed out frequent allusions in the poems of Taliesin which fix the composition of many of them to a date not older than the thirteenth and fourteenth centuries. I think that he might have gone further than he has gone, for I feel convinced that we have no Welsh poetry existing of an older date than the twelfth century, when it appears to have begun to be committed to writing."

However, even if it could be incontestably shown that the earliest allusion to the *crwth* in Welsh literature dates from the sixth century, it would still be a debatable question whether at that period it was played with a bow. We have

seen that there is no reason whatever for assuming this to have been the case.

Some musicians, who regard the *crwth* as the lineal ancestor of the violin, explain the transformation of the former into the latter in this way:—

When, in the course of time, they say, the shape of the upper part of the *crwth*, containing the finger-board, was found an impediment to the free movements of the hand, the frame inclosing the finger-board was removed, and thus the shape of the instrument obtained that of the violin.

This explanation, which was first started, I believe, by Bottée de Toulmon, appears certainly, at a first glance, very plausible. It is, however, refuted by well-ascertained facts. Stringed instruments with a neck having no external surroundings were already known at a period as remote as the existence of any other stringed instrument traceable to high antiquity.

THE CROWD.

My object in drawing attention to the allusions to the *crowd*, found in the works of early English writers, is to show the improbability that the English obtained the instrument from the Welsh. Indeed, we possess earlier representations and literary records of the *crowd* played with a bow than we possess of the *crwth* played with a bow; and we possess earlier evidences of the use of the fiddle-bow with the Anglo-Saxons than with any other race inhabiting the British Isles.

But, before noticing these evidences, it may be advisable to ascertain how our learned lexicographers explain the origin of the name of the instrument in question.

R. Nares ("A Glossary," &c.; new edition, London, 1859) states: "*Crowd*, a fiddle; certainly from the Welsh *crwth*, though some who are fond of Greek derivations deduce it from κρούω, pulso, though it is not struck or beaten. *Crowder*, a fiddler."

Charles Richardson ("A New Dictionary of the English Language," London, 1858) remarks: "*Crowd*: Spelman says *crotta*; Skinner prefers the Anglo-Saxon *crwth*."

J. O. Halliwell ("A Dictionary of Archaic and Provincial Words," fifth edition, London, 1865) has: "*Croud* and *crouth*, a fiddle; *crowd*, to move one thing across another, to make a grating noise."

S. Johnson ("A Dictionary of the English Language," edited by R. G. Latham, London, 1876) has: "*Crowd* (from Welsh *crwth*), a fiddle."

These references will suffice. I have only to add that some of the above dictionaries contain quotations from old

writers which indicate an early popularity of the *crowd*, and which deserve the attention of musical historians. Charles Richardson especially gives suggestive examples from the works of Chaucer, Wiclif and others. As regards Wiclif, a sentence from his translation of St. Luke, chap. xv., dating from the fourteenth century, alludes to the *crowd* as follows:—

> But his eldre son was in the feeld, and when he cam and neighede to the hous, he herde a symfonye and a croude.

Perhaps the word in question is here meant to signify a dance, or a cheerful assemblage; the authorised version has "music and dancing." At all events, even if Wiclif refers to a musical instrument popular in his time, and generally played in England on occasions of rejoicing and festivities, we cannot be sure whether he refers to an instrument played with the bow.

The following example, which is not given in the dictionaries, appears to me especially noteworthy:—

Thomas of Erceldoune ("Sir Tristrem;" thirteenth century): "His harp, his croude was rike." This is, as far as I am aware, the earliest of the known poems in which the *crowd* is mentioned. The way in which it is spoken of rather makes it appear as if its strings were twanged like those of the harp.

Dating from the fourteenth century we possess several examples. The following is from a Cornish sacred drama supposed to have been written in the fourteenth century. It has been published with an English translation by Edwin Norris (Oxford, 1859). It must be remembered that the Cornish language, which has now become obsolete, was a dialect of the Welsh. In this poem the *crowd* is enumerated with other instruments, thus:—

> Wethong, menstrels ha tabours!
> Trey-hans harpes ha trompours,
> Cythol, crowd, fylh, ha savtry,
> Psalmus, gyttrens, ha nakrys,
> Organs, in weth cymbalys,
> Recordys ha symphony.

(Strike up, musicians and drummers!
Three hundred harps and trumpets,
Citola, crowd, fiddle, and psaltery,
Shalms, guitars, and kettle-drums,
Organs, also cymbals,
Flutes and bagpipe.)

In the translation alluded to, some of the instruments are incorrectly rendered, which has been altered here. The *cythol* may possibly be the *cither* instead of the little instrument of the dulcimer kind which was called the *citola*. The circumstance that the fiddle (*fylh*) is mentioned besides the *crowd* rather suggests that the latter was at that time still, in shape and construction, similar to the Welsh *crwth*.

In the following extract from the "Houlate" (fifteenth century), the term *croude* designates probably the fiddle, since the latter instrument is not mentioned in the comprehensive list of the various sound-producing means used by the minstrels:—

All thus our ladye thai lofe, with lytting and lift,
Menstralis and musicians, mo than I mene may:
The psaltry, the citholis, the soft atharift,
The croude and the monycordis, the gythornis gay,
The rote and the recordour, the ribus, the rift,
The trump and the taburn, the tympane, but tray;
The lilt-pype and the lute, the cithill and fift,
The dulsate and the dulsacordis, the shalm of affray;
The amyable organis usit full oft;
Clarions loud knellis,
Portatibis and bellis,
Cymbaellonis in the cellis
That soundis so soft.

W. Dauney, who has endeavoured to explain the antiquated Scotch instruments here enumerated ("Ancient Scotch Melodies, &c.," p. 97, Edinburgh, 1838), remarks: "We need hardly observe that the *croude* was the viol or violin, the name as well as the instrument being obviously derived from the ancient British *crwth*."

No doubt the name *crowd* was not unfrequently applied to the violin when this instrument came into use. A common fiddler, or a violin-player of the most torturing accom-

plishments, is still called a *crowder*. But the violin dates only from the sixteenth century, and is neither identical with the viol nor with the ancient *crowd*. In the sixteenth century the names *crowd* and *fiddle* appear to have been used synonymously, to judge from a sentence recorded by J. Payne Collier, in his edition of Shakespeare's works. A certain John Hogon, in the year 1537, is reprimanded for "singing lewd ballads, with a crowd or fyddyll." Moreover, J. Strutt ("The Sports and Pastimes of the People of England," p. 186, London, 1845) remarks: "The name of fiddlers was applied to the minstrels as early, at least, as the fourteenth century. It occurs in 'The Vision of Pierce the Ploughman,' where we read: 'Not so fare as a fydeler, or a frier, to seke feastes.' It is also used, but not sarcastically, in the poem of Launfel."

Every musical historian knows that the names of our musical instruments have, in many instances, been transferred from one species to another. It is, therefore, not surprising that much confusion should still prevail among modern writers respecting certain obsolete instruments of remote antiquity.

The *croud* mentioned in the following stanza, from "The Palace of Honour," by Gavin Douglas, written about the year 1500, probably designates the viol, or perhaps the *rebec*:—

> In modulation hard I play and sing,
> Taburdoun, prickson discant, countering;
> Cant organe figuration and gemmell,
> On croud, lute, harpe, with monie gudlie spring.

A representation of an English crowd, dating from the thirteenth century, and shown in the annexed woodcut, is to be found on a bas-relief on the choir in Worcester Cathedral; at any rate, the sculpture depicts an angel who is applying a bow to a sort of fiddle which resembles the Welsh *crwth*. Its front is, however, oval, while that of the *crwth* of the eighteenth century known to us is square. It therefore resembles rather the old *crwth* described in the poem of the fifteenth century, previously quoted. Only five strings are given to it.

Neither a bridge nor a finger-board are indicated, though both probably existed, to judge from the manner in which the player treats the instrument. Perhaps the most noteworthy feature of this *crowd* is that it is held somewhat like a violin, rather than in the eastern fashion generally observable on the representations of our early fidicinal instruments.

A very curious and suggestive representation of an English *crowd* is to be found in the mural paintings of the Chapter House, Westminster Abbey. It dates from about the year 1400. The walls of the Chapter House were decorated with frescoes during the reign of Edward III., from the year 1336 to 1360; but, as some additions to the paintings are recorded to have been made at a somewhat later period, the instrument in question may have been designed towards the end of the fourteenth century, or in the beginning of the fifteenth. Probably the *crowder* is intended to represent a royal personage, perhaps King David, to judge from his head-dress, which somewhat resembles a crown. Musical performers designed during the middle ages are often thus adorned, and the usual explanation by our modern musical historians is—whether justified or not I do not pretend to decide—that the figures are meant for King David. The fact of their occurring most frequently in sacred books and ecclesiastical architecture certainly rather supports this opinion.

Fig. 9.—Crowd, 13th century: England.

Howbeit, the delineation of the *crowd* in the Chapter House is evidently not fanciful, but is faithfully copied from nature, as the reader may judge from an examination of the engraving (Fig. 10). No doubt the instrument was provided

with a finger-board, which is not indicated, otherwise the player could not have produced a tone from the strings as he covers them with his left hand. He must necessarily have pressed them down, if he grasped them in this way and intended to vibrate them with the bow. The only resemblance which this *crowd* bears to the *rebec* is that it has three strings. As regards its shape, its identity with that of the old continental *rote*, or *rotte*, is unmistakable. The back was evidently vaulted like that of the lute, though not so much so. The position in which the player holds the instrument before him is in the oriental manner, and is the reverse of that of the *crowder* from Worcester Cathedral just described.

Fig. 10.—Crowd, about anno 1400: England.

A manuscript of the eleventh century, which is in the Bibliothèque Nationale at Paris, contains, among some figures rudely designed, a crowned personage, who is playing an oval three-stringed instrument, which, in shape as well as in construction, is identical with the *crowd* in Worcester Cathedral. Coussemaker ("Annales Archéologiques, dirigées par Didron Aine," Vol. iii., p. 151, Paris, 1845) calls the French instrument a *crout;* and Fétis ("Histoire Générale de la Musique," vol. iv., p. 345) notices it as a *crouth*. The player, who is supposed to represent King David, holds it in his left hand and sounds the strings with a bow much curved, which he holds in his right hand. He is evidently not eliciting sweet music from his instrument, since his bow is placed below the bridge. Such inaccuracies in the representations of musical performers occur not unfrequently in the illustrations dating from the middle ages. However, some slight discernment generally enables the student to detect them and to understand what is really meant. Fétis believes that the instrument is the *crwth trithant* of the Welsh; but this can hardly be the case if, as Edward Jones

states, the *crwth trithant* was nearly identical with the *rebec*. It must be borne in mind that the Welsh word *crwth*, as well as the Irish *cruit*, is used for any kind of fiddle, whatever its shape may be. The three-stringed French *crout*, therefore, does not necessarily exhibit the shape of the *crwth trithant;* on the contrary, it rather resembles the six-stringed *crwth*. True, in his "Musical Trophy," depicted on page 89 of "Musical and Poetical Relicks of the Welsh Bards" (London, 1794), Edward Jones shows the upper portion of the frame of the *crwth trithant* as resembling that of the six-stringed *crwth*. However, his own explanation clearly proves that no reliance can be placed on the correctness of his delineation.

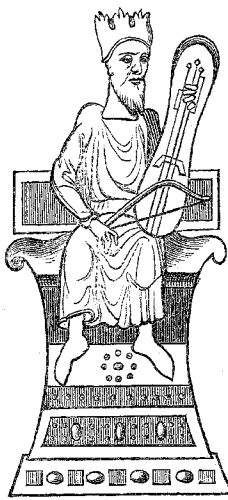


Fig 11.—Crout; eleventh century: France.

According to F. Wolf, who rests his opinion on a statement in Roquefort's "Glossaire," the designation *crout* or *crouth* may possibly have been derived from *chorus*, because it occurs in the old French literature as *croath* and *corath*. It ought, however, to be remembered that the word *chorus* was used in mediæval time, as far as can be ascertained, as a name for several musical instruments greatly different from each other in construction. In fact, the mediæval *chorus* best known was a wind-instrument somewhat resembling a bagpipe;

at any rate, it had an air-chest, or a bladder attached to the tube, through which it was blown. This curious contrivance appears to have been still popular in Germany in the beginning of the sixteenth century, to judge from an illustration given by Ottomarus Luscinius (Strasburg, 1536) and called *Platerspiel* (*i.e.* bladder-play).

Neither is it likely that the explanation by Fétis, in which he assigns a Sanskrit origin to the word, will settle the question satisfactorily. He says ("Histoire Générale de la Musique," Vol. iv., p. 334): "The Celtic name of the *crouth*, which is *crwth*, is derived from the primitive Celtic word *cruisigh*, which signifies 'music,' and which owes its origin to the Sanskrit word *krús*, which signifies 'to cry,' or 'to produce a loud sound.'" Fétis, is therefore on this point at variance with the Celtic scholars from whose dictionaries I have previously given definitions of the word *crwth*. Still, he expresses his opinion dictatorially. It is certainly safer to consult on such questions etymologists rather than musicians. Max Müller ("Lectures on the Science of Language," p. 365, London 1862) mentions the Sanskrit words *krús*, "to shout," and *rud*, "to cry"; he remarks that the Sanskrit verb *ru* "is applied to murmuring sound of rivers as well as to the barking of dogs and the lowing of cows; from it are derived numerous words in Sanskrit." But, although he mentions many words in European languages which can be traced to the Sanskrit *ru*, neither the *crwth* nor the *crouth* is among them. From his profoundness, and his musical knowledge, he would probably not have omitted to notice the derivation did it exist.

I purpose now to draw attention to some recent discoveries, which show that the *crowd* was popular also with the Scandinavians.

Professor C. E. Södling, of Westervick, in Sweden, has kindly sent me a drawing of a specimen which has been found in Dalekarlia, near the Norwegian Fjelds. The Swedish gentleman to whom it belongs calls it *luta*—a designation which its form and construction do not justify. It has, however, a vaulted back like the lute. The great breadth of its neck, into which is cut an oblong-square hole—

evidently intended for putting the hand in and thus to touch the strings—exhibits the peculiar characteristics of the genuine *crowd*. It has only three strings. This circumstance might lead to the surmise that it is an offspring of the *rebec*. However, the six-stringed *crwth* had also only three tones produced by its open strings, which were tuned in octaves, so that the bow could touch two strings simultaneously without admitting an interval foreign to the melody. On the Swedish instrument the want of a bridge would render it extremely difficult, if not impossible, to vibrate with the bow a single string without touching its neighbour. Its strings are fastened to a string-holder on the belly; but it may have had a bridge which has been lost. The age of this instrument is unknown; perhaps it dates not further back than a century or two.

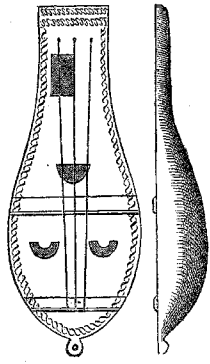


Fig 12.—Scandinavian Instrument.

Again, I possess a photograph of a carving in wood on an arm-chair made in the twelfth century, which was found in Iceland, and is now deposited in the church of Tishedalen in Norway. The carving shows King Gunnar in the cave of serpents bound hand and foot, but nevertheless succeeding in charming the serpents by touching the strings of a kind of *crowd*, lying on the ground before him, with his foot. The poetical conception to which this representation alludes has been traditionally preserved in an old Scandinavian saga. The photograph is rather indistinct; the instrument appears to have ten strings, and its shape is partly that of the ancient lyre, and partly that of the mediæval viol. The name was probably *hrotte*.

The Edda contains a mythological tradition about the hero Sigurd slaying Fafnir, a sorcerer, who, transformed into a frightful reptile, is guarding an immense treasure of gold and various precious articles, including a *hrotte*. Sigurd, having killed the sorcerer, takes possession of the treasure. Wilhelm Grimm ("Die Deutsche Heldensage," p. 386, Göttingen, 1829) supposes the *hrotte* to be a sword, and remarks that the allusion to it in the Edda is rather inexplicable, since nothing further is narrated about a sword called *hrotte*. The German translation of the Edda by Karl Simrock, p. 344 (Stuttgart, 1864), somewhat elucidates the mystery. According to the narration, Sigurd is subsequently killed by Gunnar, who, having obtained the coveted treasure, is soon compelled to hide the misery-inflicting gold deep in the bed of the river Rhine. But he evidently retains the *hrotte*, the sound of which possesses supernatural powers. King Atli, intent upon revenging the death of Sigurd, engages in war with Gunnar, takes him prisoner, and, having bound him, throws him into a cave of serpents. Gunnar, unable to move his hands, touches the strings of his charming instrument with his toes, and soothes the dangerous reptiles to sleep, except a venomous adder, which flies at his breast and pierces his heart.

The adder was evidently believed to be entirely devoid of the organ of hearing, and therefore unimpressible by the charms of music. The Hebrews appear to have been of the same opinion, to conjecture from Psalm lviii. 4, 5: "They are like the deaf adder that stoppeth her ear; which will not hearken to the voice of charmers, charming never so wisely."

The Edda, the reader need perhaps scarcely be reminded, dates from about the year 1100, and consists of a collection of poems treating of Germanic mythology. The ancient traditions to which it refers fell into oblivion in Germany since the introduction of Christianity, but were retained in the memory of the Scandinavians, especially in Iceland, probably owing to its remote and isolated position. The Icelanders are descendants of Norwegian colonists of the ninth century. It is, of course, not likely that the Scandavians, at that early period, used a bow with the instrument in question.

Although we do not possess an Anglo-Saxon description of

the *cruth*, we may ascertain its characteristics to some extent from circumstantial evidence, which is perhaps more valuable than would be a transmitted explanation, since the technical terms relating to music are frequently used rather vaguely in old historical records, and are therefore often more misleading than elucidating.

Before proceeding, I must draw attention to the spelling of the Anglo-Saxon *cruth*. The *th* in this word has the soft or flat sound as found in *this, soothe*. The Anglo-Saxons had two sounds which now in English are represented by *th*—viz., the soft sound, as in *cruth*, and the hard or sharp sound as heard in the English words *thing* and *thin*. The Anglo-Saxons had a particular letter for the soft *th*, which some modern writers indicate by *ð*; hence the spelling *crudth* in our musical dictionaries.

Without indulging in conjectural etymology, it may be surmised that the English noun *crowd*, signifying a multitude as well as a musical instrument, is derived from the Anglo-Saxon *cruth*. Be it remembered that the influence of the Anglo-Saxons upon civilisation in England was much greater than that of the Welsh. The Anglo-Saxons were converted to Christianity during the sixth century. They were notoriously fond of music, and were more advanced in the cultivation of the arts and sciences than the Celtic races. Nay, there appears to be actually a doubt among scholars respecting the Celtic origin of the word *crwth*. We have seen that some lexicographers suppose it to be from the Greek, others from the Anglo-Saxon, and so on. Sir Henry Spelman and Stephen Skinner, whose etymological works date from the seventeenth century, point to the Anglo-Saxons instead of to the Welsh. Charles Richardson, one of the most distinguished lexicographers, appears to agree with them. Probably they are right; but, as regards this question, the reader will be enabled to form his own opinion after I have given an account of the *chrotta*. If, as appears to me incontestable, the Anglo-Saxon *cruth*, which subsequently became the English *crowd*, was the same instrument which on the Continent we find called *chrotta*, we have a strong reason for assigning a Teutonic origin to the Welsh word *crwth*.

THE ROTTE.

THE stringed instrument called *rotte* is frequently mentioned in our mediæval literature, and its name, written in various ways (*rotta, hrotta, hrota, rötteh, rote, riote*, &c.), occurs during a period embracing about seven centuries. I prefer to use its German name, *rotte*, because I can trace its history more accurately in Germany than in other countries. However, before I attempt this, I must place before the reader some extracts from mediæval literature, in which allusion is made to the instrument.

Gottfried von Strassburg ("Tristan," a heroic poem; thirteenth century):—

Ueber sinen Rücke fuort er
Eine Rotten, diu was kleine
Mit Golde und mit Gesteine
Geschoenet unde gezieret,
Ze Wunsche gecordieret.

(He carried over his shoulders a *rotte*, which was small, beautifully ornamented with gold and precious stones, and properly strung.)

Wolfram von Eschenbach ("Parcival," a heroic poem; thirteenth century):—

Ern ist gige noch diu Rotte.

Thomas of Erceldoune ("Sir Tristrem;" thirteenth century):—

Tristrem trewe fere,
Miri notes he fand
Opon his rote of yuere.

Geoffry Chaucer ("Canterbury Tales;" fourteenth century):—

Well coude he synge and plaien on a rote.

John Gower ("Confessio Amantis;" fourteenth century):—

He taught hir till she was certayne
Of harpe, citole, and of riote,
With many a tewne, and many a note
Upon musicke, upon measure.

Edmund Spenser ("Faerie Queen;" sixteenth century):—

> There did he find in her delitious boure,
> The faire Pæana playing on a rote.

As regards the construction and outward appearance of the instrument, we meet with irreconcilable statements in the explanations given by our musical historians. Some remarkable examples of misapprehension occur in the following works:—

Ferdinand Wolf, in his valuable dissertation on mediæval poetry ("Ueber die Lais Sequenzen und Leiche," Heidelberg, 1841), maintains that the word *rotta* (*hrotta, rotte, rote*) used by the Latin romance and German writers of the middle ages "is not only etymologically, but also in its signification, the *crwth* of the Celtic races," and he states that Dieffenbach ("Celtica," &c., Stuttgart, 1839) and Mone ("Uebersicht der niederländischen Volksliteratur," Tübingen, 1838) have shown this to be the case. Turning to Mone's work, we find on page 32 the following explanation, here translated from the German:—

> The old German word *rotte*, which designates a musical instrument, and which is still retained in the Dutch *rotel* (signifying a dull murmur), may be explained from the Welsh *crwth* and the Irish *cruit*.

There can, however, be no doubt that the Dutch *rotel* is synonymous with the German *rotteln* or *rollen*, "to make a rolling noise." Moreover, Richardson ("Dictionary of the English Language") mentions under the heading *rout* (Anglo-Saxon, *hrutan*), "to snort, snore."

At all events, we shall presently see that the Dutch, in the thirteenth century, possessed a stringed instrument, called by them *roet*, which, as far as is ascertainable, seems to have been identical with the German *rotte*.

Again, many writers inform us that the instrument called *rote* was a hurdy-gurdy. This explanation is to be found chiefly in the English dictionaries. For instance, N. Webster's Dictionary, "*Rost* (a contraction of *crowd;* Welsh, *crwth;* Irish, *cruit*), a musical instrument, probably similar to the hurdy-gurdy."

Knight's National Cyclopædia):—"*Rote*, a musical

instrument mentioned by the early French and English writers. It seems to have been similar to what the French call *vielle*, and the English *hurdy-gurdy*."

S. Johnson's Dictionary, edited by R. J. Latham:—"*Rote* (?) Latin, *rota*, wheel; (?) Latin *crulta*, from the Keltic, crowd, fiddle. A musical instrument in which the vibration of the strings was caused by the turning of a wheel, as in the hurdy-gurdy." The signs of interrogation interspersed by the editor indicate that he has some doubts about the real derivation of the word. However, he quotes the stanza from Spenser's "Faerie Queen," just noticed, without perceiving the ridiculousness of the fair Pæana sitting in an arbour and playing on a hurdy-gurdy.

R. Nares's Glossary: "*Rote*, a musical instrument, properly that which is now called a *cymbal*, or more vulgularly a *hurdy-gurdy*. It is so called from the wheel (*rota*) which is turned to cause the vibration of the strings."

J. O. Halliwell's Dictionary of Archaic and Provincial Words: "*Rote*, a kind of cymbal, said to be the same as the hurdy-gurdy."

Professional musicians have scarcely a right to smile at these explanations, since it is chiefly their fault if the lexicographers are misinformed on musical subjects. English scholars are not usually acquainted with musical terms, and have to refer to the literary productions of musicians for the proper definitions when they are in want of such information. In the present case, Dr. Burney was probably the original misleader. He says ("History of Music," Vol. ii., p. 270): "I have not the least doubt but that the instrument called a *rote*, so frequently mentioned by our Chaucer, as well as by the old French poets, was the same as the modern *vielle*, and had its first name from *rota*, the wheel with which its tones are produced." And on p. 373 of the same volume he explains: "It is the *lyra mendicorum* of Kircher, the *vielle* of the French, and the English *hurdy-gurdy*."

Again, J. N. Forkel ("Allgemeine Geschichte der Musik," Vol. ii., p. 744, Leipzig, 1801) notices the *rotte* as a mediæval stringed instrument, and adds that the word *rota* was formerly used to designate a sort of carillon, consisting of

a number of bells or cymbals suspended in a circular frame, which was shaken and turned round to render its sound as effective as possible. He says that this kind of *rota* was also introduced into the old church-organs of Germany. No doubt it derived its name from its resemblance with a wheel, and it has no affinity with the instrument called *rotte* or *rote*. As regards the hurdy-gurdy, it is possible that it was occasionally called *rota* on account of its wheel. At any rate, it is thus designated in a treatise by Joanne Cochlaeus, entitled "Tetrachordum Musices," &c., Nürnberg, 1512. However, this appears to be the only early book in which it is thus designated, and the example is comparatively rather modern.

The earliest mention of the stringed instrument called *rotte* occurs, as far as is known, in a letter written in Latin, about the year 750, and published in the "Epistolæ S. Bonofacii Martyris," Mainz, 1629. An English abbot requests his friend, a bishop in Germany, to send him a young German who can play on the *rotte*, because he possesses such an instrument, but is unable to find a musician who understands to "harp" on it skilfully. From this curious document it would appear that in the eighth century the *rotte* was still rather unknown in England, and that its strings were twanged. Another indication of the instrument having been introduced into England from the Continent may perhaps be found in the following stanza from a poem by John Lydgate, written about the year 1420, and therefore nearly seven hundred years later than the abbot's letter. The poem is entitled "Reson and Sensuallite," and is to be found in Thomas Warton's "History of English Poetry," Section xxviii. It describes a concert in a garden. Many musical instruments are enumerated, introduced with the direction: "Here rehersyth the auctor the mynstralcys that were in the gardyn." The *rotte* is alluded to thus:—

> Of al maner mynstralcye
> That any man kan specifye:
> For there were rotys of Almayne,
> And eke of Arragon and Spayne.

The earliest description known of the *rotte*, written in German, dates from the second half of the tenth century, and is by Notker the Younger, also called Notker Labeo, a monk of St. Gallen, in Switzerland. It is published in the Abbot Martin Gerbert's work entitled "Scriptores ecclesiastici de Musica sacra potissimum" (Vol. i., p. 96, St. Blasius, 1784), as follows:—

"Fóne díu sínt ándero lírûn, únde ándero rótûn iô síben síeten, únde síbene gelîcho geuuérbet."

("Of this are other lyres, and other rotes having seven strings, and likewise seven screws.") *

This shows that in the tenth century the *rotte* was already distinguished from the *lyre*, of which it was a variety, and that it was mounted with seven strings. The statement of some writers that it was derived from the *psalterium*, and that its shape was originally triangular, may be correct, but is not supported by well-ascertained facts.

In order to prevent misunderstanding, it may be advisable to mention that Notker Labeo is called Notker the Younger to distinguish him from Notker Balbulus, generally called Notker the Elder, who lived a century earlier, also in the monastery of St. Gallen, and who was likewise a musical author. He wrote in Latin, and alludes to a *rotte* mounted with six strings, which he regards as an off-shoot of the *psalterium*—an opinion which has been adopted by some subsequent writers, without the slightest investigation.

The *rotte* is depicted in some Anglo-Saxon manuscripts which are preserved in the British Museum. In one of them, which is stated to date from the seventh century (Cotton MSS., Vesp., A. 1), the instrument is represented with a player, supposed to be King David, who twangs its

* As Mr. Engel had some doubt of this translation I have applied to Professor Max Müller, who, with the greatest kindness has referred to Notker's text, and sent me the following rendering with which Mr. Engel's may be compared:—"Of them there are in the lyres and in the rotes each seven strings, and these seven are made to vibrate in the same way." (Geuuérbet, he adds, comes from *(h)uerben*, to turn, to shake). By this I understand the lyre and the rote had the same accordance.—A. J. H.

strings with his right hand, while he is using his left hand evidently for the purpose of checking any undesirable vibrations. The instrument has six strings. If it had a finger-board in the open portion of its frame, it might be mistaken for a Welsh *crwth*. Its name is not given with the illustration. The Anglo-Saxons probably called it *cruth*. At all events, there is no other instrument of theirs known to which the name *cruth* could have been more applicable, and we find it recorded that they possessed an instrument called *cruth*.

Fig. 13.—Anglo-Saxon Rotte.

The designation *rotte*, or, rather, *rote*, came in use in England at a later period, probably not before the Norman conquest in 1066. The Anglo-Norman language contains several musical terms which were previously not in use. Even the professional musicians received another name. The Anglo-Saxons called them gleemen. After the Norman invasion they lost this appellation and were called ministraulx, which subsequently was altered into minstrels. There is no reason to suppose that the English *rote* was ever played with a bow. It differed in this respect from the *crowd*. In a verse from the Houlate, dating from the fifteenth century, which has already been noticed, the *rote* and the *crowd* are enumerated as two different instruments, thus:—

> The croude and the monycordis, the gythornis gay,
> The rote and the recordour, the ribus, the rift.

It is unnecessary for the present investigation to show how subsequently the designation *rote* became obsolete in England. Suffice it to notice that in the seventeenth century J. Dryden, in his "Song for Saint Cecilia's Day," substitutes for it *shell*, in allusion to the *testudo*, or ancient lyre:—

> Less than a god they thought there could not dwell
> Within the hollow of that shell,
> That spoke so sweetly and so well.

The Abbot Gerbert gives two interesting illustrations of the German *rotte*, in his work "De Cantu et Musica Sacra," Vol. ii., Tab. xxvi., Fig. 3, and Tab. xxx., Fig. 17 (St. Blasius, 1774). His intimation that these illustrations are copied from manuscripts dating from the ninth century has been received with scepticism by some students; however, it is accepted by Coussemaker, Fétis, Ambros, and other learned musical historians. A reference to another work by the Abbot Gerbert, entitled "Reisen durch Allemannien, Welschland, und Frankreich" (Ulm, 1767), rather tends to support their opinion; for this work, which contains an account of the Abbot Gerbert's travels, undertaken for the purpose of rescuing from oblivion interesting old manuscripts stowed away in libraries, gives some information about the manuscripts of the ninth century which he discovered in the monastery of St. Emmeran, at Ratisbon, and which he was permitted to use for his contemplated contributions to musical history. To avoid a possible misunderstanding, it must be noticed that the book adverted to was originally written in Latin, and the German translation appeared some years after the Latin edition. The Abbot Gerbert had a printing-press at St. Blasius, a magnificent monastery in the Black Forest, in Germany. Thus he enjoyed not only the pleasures of the author, but also those of the printer, binder, and publisher. The rich Benedictine abbey of St. Blasius no longer exists. In the beginning of the present century it was sequestered and turned into a factory, where spinning-jennies and firearms are made. On the dissolution of the monastery, the monks removed into Carinthia, taking with them the bones of some noble ancestors of the house of Hapsburg, who had been

buried in their abbey. These statements may appear somewhat irrelevant; they are merely noteworthy because the Abbot Gerbert is generally regarded as a great authority on the subject under discussion: the dates assigned to his illustrations are, as has already been intimated, accepted by almost all our musical historians. Some account of this distinguished prelate, and of his comfortable home, may therefore interest musical antiquaries, especially as I shall have to refer repeatedly to his publications with scepticism as to the authenticity of some of the dates given to his illustrations.

The first of the two representations of the *rotte* in Gerbert's work (Fig. 14) exhibits a five-stringed instrument resembling the ancient oriental lyre. It is depicted in the hands of a player, who holds it in a perpendicular position and twangs the strings with the fingers of his right hand. It was probably also played with a plectrum; at any rate, there is depicted, dangling on a string at the side of the instrument furthest from the player, a little square-shaped thing which, if it is not merely an ornamental appendage, must be intended for a plectrum. The ancient Greeks, in playing their *lyra*, used the *plektron* as well as the fingers. As Gerbert's work is rather scarce, it may assist the reader to know that a reproduction of the illustrations is published in the introductory chapter of the descriptive catalogue of the musical instruments in the South Kensington Museum.

Fig. 14.—German Rotte.

The second representation of the *rotte* in Gerbert's work resembles the previous one, except that the frame is slightly curved at the top, and that it is mounted with seven strings instead of five. It is designated as *cythara teutonica*, while a twelve-stringed small harp depicted by its side is designated as *cythara anglica*.

In the middle ages the name *cythara* was applied to

various stringed instruments, and especially to such as were twanged. The *cythara anglica* in Gerbert's work is almost precisely the harp occurring in Anglo-Saxon manuscripts. It was probably regarded as an instrument in particular favour with the Anglo-Saxons, Scandinavians, and some other northern nations. The Anglo-Saxons called it *hearpe*, and also *cytere;* at all events, J. Bosworth, in his Anglo-Saxon Dictionary defines the word *cytere* as "a harp;" and this definition accords with our previous observation.

As Gerbert writes in Latin, he does not give the German names of the instruments in question. The circumstance of most of the old musical treatises being written in Latin has rather prevented the popular names of certain instruments being transmitted to posterity. Kircher, for instance, calls the hurdy-gurdy *lyra mendicorum*, and we know it from mediæval literature as the *organistrum*. No doubt it had also a vulgar Teutonic name which has not been preserved.

A few remarks on the harp seem to me advisable here, because they throw some light upon the early history of the *rotte*.

Fétis ("Histoire Générale de la Musique," Vol. iv., p. 387) is of opinion that the Welsh and the Irish obtained the harp from the Anglo-Saxons. The Celtic antiquary, Edward Ledwich, entertains the same opinion. He says ("Historical Memoirs of the Irish Bards," by J. Walker, Appendix I, p. 7, London, 1786): "From the Teutonic derivation of the harp, it is easy to account for its becoming the national instrument of the English. The Anglo-Saxons were a German race, and introduced the harp into Britain. Inflamed with a thirst for conquest, and eager to possess alone that fertile isle, they almost exterminated the natives, and totally erased every vestige of Roman and British civility. . . . The Irish, I think, received the harp in the fourth and fifth centuries, from their close connection with the Saxons and other rovers from the Baltic shores, who conjunctly ravaged the coasts of Britain and Gaul in those ages."

On the other hand, many learned antiquaries regard the harp as of Celtic origin. W. Dauney ("Ancient Scottish

Melodies," p. 66, Edinburgh, 1838), remarks: "The Welsh derive the word *telyn* [the harp] from a Cambro-British root, *têl*, signifying 'stretched,' or 'drawn tight'; and they argue that it must consequently have been coeval with the first stringed instrument with which their ancestors had ever been made acquainted."

The circumstance of *telyn* being a Celtic word, not derived from the Anglo-Saxon *hearpe*, certainly points to another than a Germanic origin of the Welsh harp. As regards the peculiar construction of the *telyn* with three sets of strings, it must be remembered that the triple harp can hardly be classed with the old national instruments of Wales; at all events, it dates only from the fourteenth century, and has already fallen again into disuse.

At an early period, before the bow was applied to the *rotte*, the player "harped" it—*i.e.*, he twanged the strings much in the same way as those of the harp are vibrated. In a German mediæval manuscript noticed by F. Wolf ("Ueber die Lais Sequenzen und Leiche," p. 246), King David is described as "harping" on the *rotte*, thus: "Als her David sein Rotten spien, wan er darauf herpfen wolt." ("When King David espied his *rotte*, and desired to harp upon it.") The date of the manuscript in which this sentence occurs appears to be not exactly known. In English we have from the fourteenth century Chaucer's mendicant friar singing to the *rote* and *harpying*.

The German noun *Harfe* is supposed to be derived from the verb *raufen* or *rupfen* (Anglo-Saxon *hriopen*), "to pluck;" if this derivation is correct, it explains the expression, "harping on the *rotte*," as well as the English version of Rev. xiv. 2: "I heard the voice of harpers harping with their harps."

According to Fétis ("Histoire Générale de la Musique," Vol. iv., p. 421) the Anglo-Saxons had a kind of psalterium with a round body. He remarks: "C'etait la *rote*, *rotha* des écrivains français et latins; on en pinçait les cordes à la manière de la harpe." Howbeit, Fétis is apt to express his conjectures as well-ascertained facts. *Rotha* is probably incorrect for *hrota*; however, A. W. Ambros ("Geschichte der

Musik," Vol. ii., p. 232) quotes a poem written by Emil Deschamps, about the year 1400, in which this extraordinary spelling occurs :—

> Rubebes, leuths, vielles, syphonie,
> Psalterions trestous instrumens coys,
> Rothes, guiterne, flaustres, chaleonie.

Again, Fétis says of the lyre (*kithara*) that it has never been in use with any Germanic nation, and, consequently, that the Anglo-Saxons could not have possessed it. In reply to this assertion it may be observed that the lyre occurs in Anglo-Saxon illustrations, which will presently be noticed.

Furthermore, Fétis states that in France the *rote* was played until the tenth century without a bow. This is only what might be expected to have been the case.

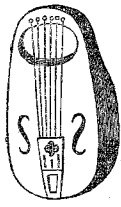


Fig. 15. Rote; thirteenth century: France.

What was the shape of the French *rote?* Did it resemble the German *rotte?* In answer to these questions, it must be remembered that the shape of the instrument did not remain exactly the same in different centuries and countries. Besides, there is every reason to surmise that of the French *rote*, as well as of the German *rotte*, several varieties existed at the same time. A six-stringed *rote*, of which an engraving is here given, is depicted on a sculpture in the Cathedral of Amiens. This representation, which is stated to date from the thirteenth century, is especially noteworthy, inasmuch as the convex back of the instrument is distinctly shown. The similarity of the soundholes with those of the violin might convey the impression that their original shape has been altered by the hand of some modern restorer ; however, the circumstance of the interesting antiquity being a sculpture, and not a painting, must satisfy on this point the most sceptical inquirer. M. de Coussemaker and some other musical historians call this instrument *crout*. Very likely it was designated thus as well as by the term *rote*. I shall presently endeavour to show that both these names had

originally the same meaning. The explanation of some modern writers, according to which the *crout* was distinguished from the *rote* by having the addition of a finger-board, is unsupported by historical facts. Although the earlier instruments of this description had no finger-board, properly speaking, the player, by putting his hand into the hole cut into the upper portion of the instrument, was generally enabled to modify the pitch of at least one of the strings by pressing it down at different distances on the soundboard. The open strings merely served as a rude accompaniment.

Before dismissing this precious *rote* from Amiens, attention must be drawn to its remarkable resemblance to the English *crowd* of about the year 1400, depicted on page 42 (Fig. 10).

In a poem by Guiraut de Calanson, of the twelfth century, as many as seventeen strings are given to a *rotte* :—

E faitz la rota
A 17 cordas garnir.

As long as the strings were merely twanged, a large number was not only not inconvenient, but was actually desirable. Later, when the bow was occasionally used with the *rotte*, it was found, no doubt, practical to reduce the number of strings. Even the immediate precursors of our violin, the reader may be reminded, had more than four strings, and the reduction of the number was evidently adopted when the players acquired a greater command over the finger-board and a greater skill in managing the bow. The further they advanced in these accomplishments, the more they found a great number of strings only cumbersome. However, some of the early mediæval instruments played with a bow had only a few strings.

The *roet*, or the *rotte* of the Dutch, was a stringed instrument played with a plectrum. According to Van der Straten ("La Musique aux Pays-Bas," Vol. iv., p. 111) it was also called *pleie;* at all events, it appears to be thus designated in a poem by Van Maerlant, which dates from the thirteenth century. Moreover, the *liceon* mentioned by Van Maerlant,

and supposed to designate the lyre, appears to have been a variety of the *roet*. The designation of *pleie* deserves attention; for, although the names of musical instruments have been and are still so frequently shifting, or carelessly employed, as easily to mislead superficial inquirers, they nevertheless may occasionally throw light upon obscure questions, especially if examined in connection with other evidences.

A *rotte* which was disinterred at a place called Kravig, in Nummedalen, Norway, is entirely of wood, and closely resembles the ancient oriental lyre, to judge from the drawing which has been sent to me. There are unmistakable indications of its having had seven strings. Three tuning-pegs are still extant, and between them are four holes in a row, into which the missing tuning-pegs were evidently inserted. The back is lost: it is therefore impossible to ascertain whether the body was convex; however, to judge from the shape of the frame, the back must have been rather vaulted. The instrument measures two feet in length, eleven inches in width, and four inches in depth. The Scandinavian musical antiquaries call it *straengeleg;* it is, however, precisely the *rotte* of the middle ages.

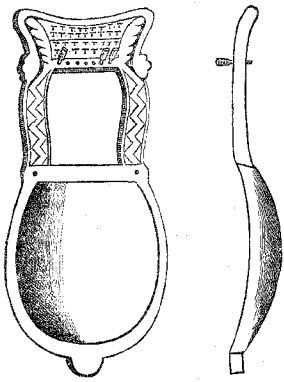


Fig. 16. Straengeleg: Norway.

Another noteworthy indication of the wide-spread popularity of the *rotte* during the middle ages is to be found in a treatise on the music of the Moors in Spain, written by Ash-

shakandi in the year 1231. The author was an Arab, and wrote in his native language. He mentions, among the stringed instruments which in his time were manufactured at Seville, the *rótteh*. Pascal de Gayangos ("The History of the Mohammedan Dynasties in Spain," by Admed Tbn Mohammed Al-Makkari, Vol. i., p. 365, London, 1840) says: "The word *rótteh* is not Arabic, and not to be found in the dictionaries." The *rótteh* must therefore be one of the few musical instruments which the Moors obtained from European nations in return for many which they brought to Europe.

A variety of the *rotte* is represented in an Irish manuscript psalter of the tenth century, which is in the British Museum (Vitellius, F. XI.). This is probably the instrument which the Irish called *cionar cruit*. It is mounted with twelve strings. Its frame is ornamented with carving. The player, who is seated in an arm-chair, holds the instrument in his lap in a perpendicular direction, and twangs the strings with his fingers. A faithful reproduction of this curious illustration is given in the "Essay on the History of Musical Instruments," which is published with the descriptive catalogue of the musical instruments in the South Kensington Museum.

Some other traces of the universal popularity of the *rotte* in different European countries could be pointed out; but those which have been noticed will suffice for the purpose of the present investigation.

In Germany the name *rotte* gradually became obsolete about five centuries ago. However, a sort of lyre, called *kugelharfe*—in fact, the old *rotte* with a new name—was still occasionally constructed two centuries ago.

The argument of Ferdinand Wolf and other scholars that *rotte* sometimes signified an instrument played with a bow, because it occurs in mediæval poetry mentioned closely together with the fiddle, has but little weight, since we find not unfrequently the names of different kinds of instruments placed together evidently for the sake of rhythm and rhyme. Still, certain lines, such as the following, seem rather to support the argument:—

Wace's "Le Brut" (a Romance in Norman-French; twelfth century):—

De vièle sot et de rote.

"Charlemagne" (an Anglo-Norman poem; twelfth century):—

E cantent e vielent e rotent cil juglur.

Furthermore, F. Wolf notices the following sentence from Roquefort's "De l'Etat de la Poésie Française dans les XII^e et XIII^e Siècles (Paris, 1314):—

Vièles, gygues, et rotes.

Scholars do not generally possess also musical knowledge. Perhaps the following explanations, in which the terms *rotte, rebec*, and *viol* are used synonymously, may thus be accounted for. In an annotation to Allain de Lille's "De Planctu Naturæ," which dates from the thirteenth century, and which is quoted by Coussemaker in his "Mémoire sur Huchald" (Paris, 1841), occurs the explanation: "Lira. Vioel. Lira est quoddam genus citharæ vel fitola, alioquin de reot. Hoc instrumentum est multum vulgare." ("Lyre. Viol. The lyre is a kind of cither or fiddle, moreover the rotte. This instrument is very common.")

Some musical antiquaries, who notice this passage, give *sitola* instead of *fitola*. Perhaps the first letter of the word is indistinct in the manuscript. If *sitola* is the correct reading, it probably refers to the *cistole* or *sistole*, better known as the *citole*, which was a small species of dulcimer, the strings of which were twanged with the fingers, the player holding the instrument in his lap. However this may be, the Spaniards have a large viol called *citola albordada*, which is said to be very similar to the ancient Spanish *vihuela de arco*, which will presently be described. The *citola albordada* is still occasionally played by blind persons.

Again, according to a Latin vocabularly dating from the year 1419, which is noticed by A. W. Ambros ("Geschichte der Musik," Vol. ii., p. 29): "Rott, rubela est parva figella." ("The rotte is a rebec, a small fiddle.").

However vague these definitions may appear, they indicate at least that on the Continent the term *rotte* was occasionally used to denote a fiddle, as early as in the thirteenth century. I shall presently endeavour to show the same was the case with the term *lyra*, which originally designated a lyre closely resembling the genuine *rotte* of the early middle ages.

As regards the name *rotruange*, which the French menétriers gave to a peculiar kind of poetry, usually having a refrain or burden, and especially sung as an accompaniment to certain dances, some musical historians suggest that this designation may have been derived from the instrument *rotte*, played by those minstrels. This is, however, unascertained, and appears doubtful. The same remark applies to the terms *rotruenge*, *rotruhenge*, *rottuhenge*, *rotwenge*, *rotruwange*, *rotewange*, and *rotwange*, which are only different spellings of *rotruange*. On the other hand, there are the old French words, *rotéor*, a player on the rote, and *roterie*, a song with an air suitable for being played on the rote. J. O. Halliwell, in his "Dictionary of Archaic and Provincial Words, &c., from the Fourteenth Century" (Fifth Edition, London, 1865), gives *rotoure*, "a player on the rote."

Furthermore, the English expression "to say by rote" (*i.e.*, mechanically, with little attention to the meaning of the words) alluded perhaps originally to the musical instrument, although most scholars explain it as being a derivation from the Latin *rota*, supposing the metaphor to be borrowed from the motion of a wheel, which, when once begun, continues with but little impulse; or perhaps from the French *routine*, any practice frequently pursued, or frequently returning. However, R. Nares, in his "Glossary" (New Edition, enlarged by J. O. Halliwell and T. Wright, London, 1869), defines the antiquated English verb *to rote*, as signifying "to repeat by memory as the tune of a song is usually repeated; also to tune, in singing or playing;" and he cites some sentences from Drayton's poems, written about the year 1600, which support this definition. For instance:—

> And if by chance a tune you rote,
> 'Twill foot it finely to your note.

Or the following:—

> I to my bottle strait, and soundly baste my throat,
> Which done, some country song or roundelay I roat.

This intimation must suffice, since the question concerns etymologists rather than musicians. At any rate, the latter in their investigations soon become aware of the futility of drawing conclusions from the names of their musical instruments elucidatory of the early history of the violin family. Still, it is advisable to scrutinise everything which may possibly yield information.

THE CHROTTA.

If the reader has had the patience to follow these researches thus far, I think I shall now be able to convince him that there is no foundation for the assertion, made by almost all our musical historians, that the *chrotta* mentioned by Venantius Fortunatus was played with a bow. It must be borne in mind that the stanza which alludes to it dates from the second half of the sixth century. Forkel ("Geschichte der Musik," Vol. ii., p. 117) spells the name of the instrument without an "h," *Crotta;* and so do some other writers, who may have consulted him. But the hint thrown out by them that *crotta* may be a corruption of the Greek *kithara* seems too bold to be seriously entertained. Ferdinand Wolf ("Ueber die Lais, Sequenzen und Leiche," p. 58), after having quoted the stanza containing the words "Chrotta Britanna canat," adds the suggestive information: "A manuscript in the Vatican has 'Rotta Britanna canat.'" This fact certainly affords a strong additional evidence in support of the opinion that *chrotta* and *rotte* designated originally the same instrument.

Perhaps undue importance has been given to those lines of Venantius Fortunatus by some musical historians in their attempts to trace the origin of the violin. At all events, it is advisable not to ignore an observation on this question made by Fétis ("Histoire Générale de la Musique," Vol. iv., p. 494) and here translated from the French:—

"We can place only a limited confidence in the writers of the early uncivilised centuries, and of the middle ages, as

regards any statements respecting music and musical instruments. An example showing how unreliable their statements sometimes are is afforded in a verse by Venantius Fortunatus, in which we have a description of the church in Paris, and of its clergy, at the time when Saint Germain was bishop of this city—that is to say, about the middle of the sixth century. Venantius Fortunatus says that the singing of the Psalms was accompanied by the sounds of the organ, lyre, flutes, trumpets, cymbals, and drums."

Fétis quotes the verse alluded to, and continues:—"These names of instruments were required by Venantius Fortunatus for the euphony of his verses, and he took them from the poets of antiquity without troubling himself about the improbability of the combination of such instruments in a church for accompanying the Psalms."

Notwithstanding this sensible observation, Fétis cites the often-quoted lines from the poem of Venantius Fortunatus in proof of his opinion that the *chrotta* of the sixth century was the *crwth* played with a bow; because he had to uphold a preconceived impression derived from Edward Jones, Sir John Hawkins, and other previous advocates of the Welsh origin of this instrument.

Probably *Chrotta Britanna* was meant by Venantius Fortunatus to refer to a popular instrument of the inhabitants of Brittany, in France, who lived in the neighbourhood of Poictiers, where he was bishop. Although these Britons were a kinsfolk of the Celtic race in England, it does not necessarily follow that the latter had the same musical instruments which were in use in Brittany. This proposition ought not to be accepted as an ascertained fact until more weighty evidences are forthcoming than those which we possess at present.

The *chrotta* seems to have been identical with the common Eastern lyre, called by the Greeks *chelys*, and by the Romans *testudo*. This lyre was introduced into Central and Western Europe at an early period, probably at the time of the Roman conquests. The strings were twanged with the fingers and also with a plectrum. Representations of this instrument, evidencing its existence in Western Europe

during the earliest centuries of our Christian era, are not wanting. Moreover, it must have been a favourite instrument with the primitive Christians, because we find it represented on some early monuments of Christian art dating from the fourth century. In one of them Christ is depicted as Apollo touching the lyre. And though it does not appear to have been with the Anglo-Saxons so favourite an instrument as was the harp, it must have been rather popular with them at an early period, to conjecture from an illustration dating from the ninth century, which is reproduced in J. Strutt's "Sports and Pastimes of the People of England from the Earliest Period to the Present Time." The illustration alluded to depicts a lyre in the hands of a gleeman, or Anglo-Saxon musician, who twangs its strings with a plectrum, to the dancing of a young man, while another gleeman is playing on a double-flute of the kind which we find so frequently represented on the monuments of the ancient Egyptians, Greeks, and Romans. The shape of the lyre is precisely the same as that which is still often used for ornamentation. There are only four strings given to it; perhaps the number may be incorrect from carelessness of the Anglo-Saxon artist, or of the copyist of the original drawing; at any rate, it is hazardous to place implicit confidence in such evidences in regard of minor points, and to draw therefrom inferences, since experience has often shown that the details in such illustrations ought not to be relied upon without corroborative evidence as to their correctness.

I purpose now to submit to the judgment of the reader my own opinion about the origin of the names of the musical instruments *chrotta*, *rotte*, *crowd*, and *crwth*. It appeared to me advisable first to state carefully, even at the risk of being somewhat diffuse, the conjectures and assertions of previous writers on the subject, in order to acquaint the reader exactly with the objections which may perhaps be advanced against my explanation. If it should prove untenable, it may nevertheless be of some assistance in ascertaining the truth, since the evidences on which it is founded are taken from indisputable historical facts only. The obsolete German

words to which I shall have to refer are given in the comprehensive dictionary of the German language by Daniel Saunders ("Wörterbuch der Deutschen Sprache," Leipzig, 1860-65). I here mention this once and for all, to obviate the inconvenience of citing repeatedly the title of that valuable source of information.

My proposition is, that the name of the musical instrument *chrotta* was derived from the Old High German *chrota*, signifying "a toad," and being applied to the species of lyre which the Greeks called *chelys*, and the Romans *testudo*.

The Old High German language, or, rather, its literature, dates from about the seventh century to the twelfth century; the Middle High German from the twelfth to the sixteenth century; and the Modern High German from the time of Martin Luther, in the sixteenth century.

The construction of the ancient Eastern lyre, to which I shall have to refer, may be supposed to be known to musicians who take an interest in the present investigation. Perhaps the reader has seen the specimens of the Nubian *kissar* which are deposited in the South Kensington Museum. They convey an accurate notion of the primitive lyre. Not only the designation *kissar* (Greek, *kithara*) but also the entire construction of the Nubian lyre show that we have before us a faithful representative of the famous *chelys* constructed by Hermes.

However, in order to prevent any misunderstanding, the following short statement respecting this instrument appears to me desirable.

The Greeks had various kinds of the lyre distinguished by different names, such as *lyra*, *chelys*, *phorminx*, *kithara*, &c. Likewise the Romans possessed various kinds; even the *psalterion*, or *psalterium*, may not improperly be classed with the lyre family.

The oldest and most common lyre was, according to mythological tradition, of divine origin. Hermes (or Mercury) constructed it from the shell of a tortoise, which he found on the banks of the Nile. It was therefore regarded as having been invented in Egypt. This primitive lyre had,

according to tradition, only three strings. The Greeks called it *chelys*, and the Romans *testudo*, both words signifying "tortoise." Its back was made of wood, convex, in imitation of the back of the tortoise, or a real tortoise-shell was used. The designation *kithara* (or *cithara*) appears to have been also used for this lyre, or for a variety differing but slightly from it. The term *lyra* implied the lyre in general; but its original meaning is supposed to be synonymous with *chelys*.

The Romans, it must be remembered, had as many different kinds of the lyre as had the Greeks. On a fresco painting in Pompeii, of which a photograph has been taken, are represented two players; one of them being seated, strikes with a plectrum a lyre held in a perpendicular direction, and having eight strings stretched over a rather large sounding body. This instrument probably resembles the Greek *phorminx*. The other player is standing, and has a seven-stringed lyre, which he holds in a horizontal direction, or rather slightly oblique, the upper end being somewhat raised. This lyre is the Roman *testudo*.

There can be no doubt that the Roman *testudo* was known in Central and Western Europe about the beginning of our Christian era. Most likely the Romans introduced it into the countries which they subjected to their dominion; or the *chelys* may have been already previously known to some extent in these countries through immigrations from Western Asia, or through the influence of Greek colonies, as some musical historians suppose. The chiefs and the higher classes of the nations subjected by the Romans probably obtained the *testudo* from their conquerors; and thus it may gradually have become known to the lower class of people.

According to Diodorus Siculus, who lived about a century before our Christian era, the bards of the Gauls, in France, accompanied their vocal effusions with a stringed instrument which resembled the Roman lyre; and Ammianus Marcellinus, who lived in the fourth century of our era, states the same, with the difference that he mentions the instrument not as resembling the lyre, but as being a

real lyre. These records are well known to musicians who take an interest in the history of their art; it will therefore suffice here to allude to them without further comment.

Some Celtic medals, supposed to date from the first century of our era, which have been found in different

Fig. 17.—Lyres from Pompeii.

districts of France, represent a three-stringed lyre. Illustrations of these medals have been published by Eugene Hucher ("L'Art Gaulois, ou les Gaulois d'après leur Médailles," Paris, 1868), and also, copied from that work by Fétis ("Histoire Générale de la Musique," Vol. iv., p. 342, Paris, 1874). However, the lyres may possibly be representations of the Roman *testudo;* at any rate, it does not follow that

they are Celtic because they were found among the Gauls in France.

We have already become acquainted with the lyre of the Anglo-Saxons in an illustration dating from the ninth century. In fact, this instrument appears to have been held in as high estimation by the primitive Christians in some European countries as it was with the ancient pagan nations of the East. It has been found depicted in the famous catacombs at Rome, represented in the hands of Christ, who is subduing by its sounds the human passions, instead of ferocious animals of pagan conception.

The great popularity of the lyre with several European nations in the beginning of our era, and the ancient tradition concerning the origin of the instrument, suggested to me that *chrotta* might have the same meaning as *chelys* and *testudo*. The Germans call the tortoise *schildkröte—i.e.*, "a toad with a cover." *Kröte* is the common German designation for the toad. The shell of the tortoise is also not unfrequently called *kröte*, as well as *krot* or *krott*.

Chrota, or *chreta*, is the Old High German word for *kröte;* and *krot*, or *krotte*, is the Middle High German word for *kröte*. The Old High German word *chrota* may still be traced in the Swedish *groda*, "a toad or a frog."

Now, if the Germans called the *testudo*, or Roman lyre, *chrota*, or *krotte*, it is perhaps not difficult to account for the designation *rotte*, or *rote*, which occurs so frequently in the literature dating from the latter centuries of the middle ages. There are similar words in the German language in which the initial consonant has been dropped in the course of time. The reader may easily convince himself of the correctness of this assertion by referring to Saunders's dictionary before mentioned. To notice an instance or two in which the consonant is to be found :—

The raven (German, *rabe*) is called by the country-people in some districts of Germany *krappe*. The provincial German words *kring* and *kring* designate a circle or ring (High German, *ring*). The words *röcheln* and *kröcheln* have in German both the same meaning—viz., "to make a low,

hoarse noise in the throat, to croak." Moreover, the suppression of the consonant "k" may be also observed in many English words derived from the German—as, for instance, *knight* (German, *knecht*), *knave* (German, *knabe*), *knot* (German, *knoten*). Also in the middle of a word, as *rye* (German, *roggen*, *rocken*), &c.

The circumstance that the German *rotte* is to be found spelt with an aspirate—thus, *hrotte*—may perhaps suggest a derivation from *chrota*. This aspirate occurs not unfrequently in Anglo-Saxon, and appears to form a link between the guttural sound "ch" and its silence before the consonant "r." But this is a question which etymologists are much better qualified to solve than are musicians. Thus much I may venture to assert: the *hrotte*, as here spelt, does not occur in the numerous examples from the poetry of the troubadours and Anglo-Normans which have been collected for the purpose of evidencing the former popularity of the instrument. In these examples we find *rota* and *rote*. No doubt *hrotte* appertains to the ancient Gothic dialects of northern Europe.

Furthermore, attention must be drawn to the following coincidence, which, unless it can be shown to be accidental, suggests a derivation of *rotte* from *chrota*, if considered with the evidences already pointed out. The English *crowd* signifies "a multitude confusedly pressed together, a swarm a shoal, a mob," as well as a certain musical instrument. The Anglo-Saxon *cruth* had the same double meaning; and precisely the same is the case with the German *rotte*. If I may be permitted to express a hasty conjecture, I should suggest that, as *rotte* designates especially a vulgar and clamorous mob, it may perhaps have been originally used in allusion to the croaking of frogs (*kröten*), which during the summer evenings are so abundant in the German ponds. If this was the case, it perhaps explains why the mediæval writers, as Ambros points out ("Geschichte der Musik," Vol. ii., p. 30, Breslau, 1864), regarded the word *rotta*, or *rotte*, as a barbarous name for a musical instrument.

Improbable as it may appear that the Romance languages

obtained the designation *rote* from the German, this hypothesis is less difficult to accept than the usual one, which assigns to it a Celtic origin.

We must not omit to notice the definitions of the English words *rout* and *riot* given in the dictionaries.

C. Richardson says: "*Rout*: the etymologists are divided between the Latin *rupta* and *rota*. If from *rupta*, the meaning will be a bursting or rushing in; if from *rota*, a globe, or compact body of men, &c. *Riot* is undoubtedly the same word as *rout*, differently written, and with some difference also in the application."

Some lexicographers derive *riot* from the Latin *rista*, French *riote*. Webster, and after him Latham, define the verb *to rout* as "to assemble in clamorous and tumultuous crowds." These definitions are probably known to the reader; an allusion to them is therefore sufficient to show that, according to the learned lexicographers, *rout* and *riot* are not derived from *rotte*. The Dutch *graauw*, "a rabble," may perhaps be the English *crowd*, and the Anglo-Saxon *cruth*. Whether the Anglo-Saxon *rót*, or *rott*, "cheerful, rejoicing, splendid," has any connection with the musical instrument *rotte* appears doubtful; more likely this is the case with the Anglo-Saxon *hreotha*, "a shield or crust" (Latin, *crusta*).

If, as I have endeavoured to show, the word *crwth* is derived from the German *chrota* or *krotte*, we might perhaps expect to find also in Wales some popular traditions about the original construction of the musical instrument which bears that name from the shell of the tortoise. Perhaps a musical scholar thoroughly acquainted with the Welsh language might detect traces of such a tradition. As I do not possess the advantage of this knowledge, I am compelled to consult intelligent Welshmen. A clergyman residing in a village in South Wales, who is familiar with the vernacular language of the Welsh country-people, has kindly sent me the following words, denoting several amphibiæ. Perhaps these words are known to the reader, as they are found in the Welsh dictionaries; but it may be advisable to notice them here, thus: The tortoise, *crogen-granc* or *crogen-cranc;*

a shell or cover, *crogen;* the crab, *cranc;* the frog, *llyffant;* the toad, *llyffan-du—i.e.*, black frog. I must leave it to etymologists to determine whether *crogen* can possibly have any connection with *crwth*.

In the old description of the *crwth* already noticed, which Edward Jones supposes to date from the fifteenth century, the back of the instrument is likened to "the back of an old man." Can this possibly allude to the tortoise?

Howbeit, the tradition that a certain favourite stringed instrument of theirs has been originally constructed from the shell of a tortoise prevails with several nations, and affords, without corroborative evidence, no proof of the instrument with which this notion is associated having been derived from the ancient lyre. Take, for instance the *vina* of the Hindus, which is also called *kach' hapi*, signifying "a tortoise," and is believed to have been originally made of the shell of that reptile. The construction and form of the *vina* are entirely different from those of the lyre *chelys* or *testudo*.

Again, the lute, which during several centuries was as popular with many European nations as the pianoforte is with them at the present day, was designated by the Latin name of *testudo*, because its vaulted back was supposed to represent a tortoise-shell. Ernst Gottlieb Baron, in his treatise on the lute ("Historische Theoretische und Practische Untersuchung des Instruments der Lauten," Nürnberg, 1727), takes much trouble to prove that it is an offspring of the *chelys*. We know now, however, as a well-ascertained fact, that we obtained the lute from the Arabs, who still possess such an instrument, calling it *el'oud;* hence its name *lute*. We also know that the ancient Eastern nations had, besides various kinds of the lyre, certain stringed instruments which closely resembled the lute.

I mention these facts, which seem to confute some of my previous arguments, since, in order to ascertain the truth, it is especially advisable to take into consideration whatever tends to rebut a new proposition. A prudent man who desires to purchase a house does not look only at its frontage,

but he examines it thoroughly, especially in its inside. Our musical historians are apt to erect edifices which have an inviting front aspect, with a rather shaky framework, on a weak foundation.

The following assertion by Edward Jones is noteworthy as an example of the biassed spirit which prevails in his dissertation on the antiquity of the *crwth*. He remarks ("Musical and Poetical Relicks of the Welsh Bards," p. 33, London, 1794) that the French word *jongleurs*, designating the perambulating minstrels, who formed a lower class of musicians than the troubadours, is derived from the Celtic languages, being a corruption of the Welsh *bôn-y-glêr*, which signifies "a low class of minstrels," and from which he also traces the English word *bungler*. Now, whatever may be the origin of the English *bungler*, it is well known that *jongleur* (old French, *jougléor*) is derived from the Latin *joculator;* and, therefore, if the Welsh term has any connection with *jongleur*, it must have been borrowed from a continental language.

Again, Edward Jones, on page 115 of his work just quoted, says that the lowest of the strings which, on the *crwth*, are placed by the side of the bridge is called in Welsh *vyrdon* (English, *burden*). Also the Irish language has this term, which, it must be remembered, designates in music either "a refrain" or "a drone." In the Welsh reference to the strings of the *crwth*, it designates a drone, because the string called the *vyrdon* produces the lowest tone of all, and the pitch of this tone cannot be altered by the finger of the player. The mediæval viol in use on the Continent was also generally supplied with a drone-string or two, which had much the same function as the drone of the bagpipe. The Germans used to call the drone *hummel*, on account of its continuous humming sound.

Now, the recorded *vyrdon* is pointed out by Edward Jones and his followers as a proof that our musical term *burden* (Anglo-Saxon, *byrthen;* French, *bourdon;* Italian, *bordone*) has been derived from the Welsh. Having adopted the opinion that the *crwth* is the parent of the violin, they find it no doubt difficult to concede that a term which was

applied to a characteristic peculiarity of the *crwth* should not be genuine Welsh; and their preconceived notion led them to disregard the statements of archæological scholars, who are greater authorities on this question than are musicians, and who point to the mediæval Latin *burdo*, "a drone," and to its occurrence in romance literature. If the word is of romance origin, the Welsh and Irish may have obtained it through the English.

Perhaps the following observation by Thomas Wright ("Essays on Archæological Subjects," Vol. ii., p. 33, London, 1861) explains the occurrence of those musical terms in the Welsh language.

"I am perfectly satisfied," T. Wright remarks, "that the Welsh language, as we know it, contains a considerable number of words which have been taken directly, not only from the Anglo-Saxon, or English, but from Anglo-Norman also, and the former perhaps came into the Welsh language since the Norman Conquest."

Nay, the very name of the nation which claims to have given to the continental nations the parent of the violin and various musical terms, is probably foreign. "The German race," T. Wright explains, "had a term for those who were of a different race from themselves, which was represented in Anglo-Saxon by the noun *wealh*, 'a foreigner,' and by the adjective *wælisc*, or *wylise*, 'foreign,' but which, as the Romans were the only race quite different from their own with which they had much acquaintance, they applied especially and almost solely to people speaking the Latin tongue. During the middle ages the term *Welsh*, in the German languages of the Continent, meant especially French, but was applied also to other neo-Latin dialects; in the German of the present day the same word (*Wälsch*) is applied peculiarly to the language and people of Italy. It was no doubt for the same reason—namely, that they were a people speaking Latin—that the Anglo-Saxons applied this word to the population they found in Britain, and it probably became extended to what we now call Wales and the Welsh, merely because, when they subsequently became acquainted with them, the Anglo-Saxons

confounded the inhabitants of that district with the other old inhabitants of South Britain."

With these remarks I shall conclude my investigation respecting the history of the *chrotta*. I have only to add that in the following discussion on the *rebec*, I shall be able to express myself more positively than I could venture to do on a subject so obscure as the *chrotta*.

THE REBEC.

THE earliest instrument played with a bow known to European nations appears to be the *rebab* of the Arabs. As the Saracens settled in Spain in the beginning of the eighth century, we cannot be far from the correct time if we fix the introduction in Europe of the fiddle-bow at about the year 720.

Possibly this implement may have been not entirely unknown to our ancestors at an early period; but we possess no evidence indicating that it was known. If it had been popular before the arrival of the Arabs, we should probably have found some signs of its existence. Even after the eighth century it was evidently rather despised, and it obtained only gradually popular favour. Stringed instruments were chiefly used for accompanying the voice, and for this purpose the lyre and harp were better suited than a primitive sort of fiddle sounded with a bow. The latter instrument could serve scarcely any other purpose than to keep the voice of the singer in the pitch in which he commenced his recitation, and to supply him with a sort of drone accompaniment, which may be regarded as the most primitive attempt at producing concord, not to say harmony.

From Spain the *rebab* was gradually diffused through Central and Northern Europe, and its Arabic name became corrupted into *rabel*, *arrabel*, *rabebe*, *rebebe*, *rubebe*, *reberbe*, *rebula*, *rebeshe*, *ribus*, *ribible*, *rabeca*, *rebec*, and similar names occurring in different European languages. The country-people in Spain have still a sort of fiddle called *rabel;* the peasants in Brittany, France, have still a *rêbek;* and the *rabeca* of the Portuguese, of which Agostinho da Cruz pub-

lished in the beginning of the seventeenth century an instruction book, entitled "Lyra de Arco, ou Arte de Tanger Rabeca" (Lisbon, 1639), is likewise a derivation of the Arabic *rebab*.

Furthermore, the antiquated Italian *rebecchino*, a small boat-shaped fiddle, generally called *pochette* or *sordino*, is a diminutive *rebec* derived from the *rebab*. The last-named instrument is still in use with the Arabs and other Mohammedan nations. It is generally three-stringed, but there are also two-stringed varieties. The same appears to have been the case when the instrument became known to European nations.

The wide diffusion of the *rebab* through countries which were never conquered nor possessed by the Arabs is very remarkable. Likewise, the lute (*el'oud*), the guitar (*kuitra*), the naker, or kettle-drum (*nakkarah*), and several other of our most popular musical instruments, either antiquated or still in use, are known to be of Arabic origin. This is also evident from their names. No doubt, the Arabs, when they came to Europe, in the beginning of the eighth century, were more advanced in the cultivation of music, or at all events in the construction of musical instruments, than were the European nations. Thus only can their astounding musical influence be accounted for.

Charlemagne, towards the end of the eighth century, most likely encouraged the introduction of the Moorish instruments into his empire. This enlightened monarch instituted schools for the cultivation of vocal music at Metz, Soissons, and St. Gallen; no doubt, he appreciated the superiority of the musical instruments which had become known to him from Spain.

It has been often asserted by musical historians that the Crusaders introduced certain oriental musical instruments into Europe. Very likely they contributed in making the instruments still more popular; but, at the time of the Crusades, from about the end of the eleventh century to the end of the twelfth, the Arabic instruments, including the *rebab*, were no longer new in Europe, and the Crusaders saw only Arabic instruments with the Mohammedans.

In fact, there is no known European instrument played with a bow which is older than the *rebec*. There are some old Slavonic fiddles which may have been derived direct from Central Asia—such as the Russian *gudók*, a rude sort of violoncello with three strings, still occasionally found among the Cossacks, and believed by them to be of very high antiquity. However, as the age of the *gudók* has not been definitely ascertained, the popular belief that it is the oldest fiddle in the world is of but little use for our investigation. The Russian name for the violin, which is *skrúibka*, and still more its Polish equivalent, *skrzypcé* (derived from *skrzyp*, "grating"), rather intimates that the Slavonic races formerly considered the sounds produced by the bow as not the most musical; and in this respect they were evidently of one opinion with the Arabs and Persians when these named their fiddle *rebab*—*i.e.*, "emitting melancholy sounds."

If the *gudók* may be supposed to have been derived from the three-stringed *rebab*, the Slavonic fiddle, *gusla*, with its single string of black horsehair, suggests a derivation from the Arabic *rebab-esh-sha'er*, or from the Arabic *kemangeh-a-gouz* —*i.e.*, "the old viol." The Slavonic term *gusla* designates "goose"; perhaps the instrument was originally made in the figure of this bird, or it had usually some carving at the top representing the head of a goose. Be this as it may, the bow and the present shape of the *gusla* have evidently been adopted from the Arabs, or from the Turks, who obtained several of their musical instruments direct from Persia. The Russian *gusli*, a kind of dulcimer, represents probably the earlier construction and form of the instrument.

The Kalmuks introduced into Russia a fiddle which came direct from Central Asia without passing through the hands of the Arabs. But this Kalmuk instrument has never been adopted by European nations; besides, it was brought to Russia after the bow was already known in that country. The Kalmuks came to Russia in the thirteenth century.

The influence of the Arabs upon the cultivation of music can be distinctly traced in several countries of eastern Europe, besides Turkey, where we might naturally expect

to find a musical system similar to that of the Arabs and Persians. In fact, the Arabs have carried their *rebab* to all the different districts of the world in which they have gained a footing. The *rebab* appears to have been adopted by the Negroes and Kafirs in several African countries which have never been subjected to Mohammedan invasion. I have in my collection of musical instruments a very rudely-made fiddle of the Zulu-Kafirs, which evidently has been con-

Fig. 18. Gusla: Servia.

structed from the model of a *rebab*. It consists of an iron basin over which a skin is stretched, and which is mounted with three catgut strings. The bow is of the most primitive kind imaginable. This simple contrivance was sent by an English gentleman from Pietermaritzburg to the Manchester Exhibition, to be deposited with the ethnological curiosities. Two fiddles of the Hottentots, which are in the museum of the London Missionary Society, are four-stringed,

and were probably made in imitation of a violin belonging to a Dutch Boer. They are noteworthy as exceptions, almost all the African fiddles known exhibiting an oriental character more or less resembling the *rebab*.

It is, of course, quite possible that different nations may have invented the fiddle-bow entirely independent of each other. But we possess no evidence of this having been the case, while, on the other hand, indications are not wanting of its diffusion by the Arabs, and subsequently by some European nations. This question, needs, however, further elucidation. Perhaps the following step to obtain the necessary evidence for investigation may ultimately lead to some satisfactory result. A little handbook, published by the British Association for the Advancement of Science, and entitled "Notes and Queries on Anthropology for the Use of Travellers and Residents in Uncivilised Lands" (London, 1874), contains, among numerous questions referring to different subjects, a list of above a hundred questions respecting the cultivation of music. As I have supplied the musical portion of this publication, it naturally has occurred to me to ask for information concerning old popular traditions or historical records about stringed instruments played with the bow, as well as to any peculiar characteristics observable in any instruments of this class which may be in use in certain countries.

Our musical historians generally take it for granted that when the bow came into use among European nations a new instrument was constructed for the special purpose of being played with the bow. I doubt whether this has been the case in any country until the bow had attained some popularity. Even the strings of the *rebab* appear to have been originally twanged; at any rate, there is still a kind of *rebab* in use in Hindustan which is played with a plectrum, and which may reasonably be supposed to be older than the other, because its treatment is more simple and primitive. Probably it had formerly some other name; however this may be, it closely resembles the *rebab* of the Arabs, the name of which it bears.

Again, the Hindus, in the present century, have contrived

some innovations by applying the bow to their *sitar*, the strings of which were formerly only twanged, and by adopting some alterations in the shape of this instrument, in order to render it more suitable for the application of the bow. Thus a new species of *sitar* has recently come into use, while the old one from which it is an offspring has retained its former popularity.

Now, here we observe exactly the kind of transformation which occurred after the Arabs had brought their *rebab* to Europe. When this instrument became known to the European nations, they more or less adopted the bow for some of their favourite instruments, and especially for such as resembled the ancient lyre, because its application was more suitable to the lyre than to the harp. Consequently, the designation *lyra* was sometimes used in mediæval Latin for a stringed instrument played with the bow; while the harp and similar instruments, the strings of which were twanged, retained the name *cythara*. The one-stringed fiddle supposed to date from the ninth century, but probably of a later period, which is depicted in Gerbert's "De Cantu et Musica Sacra," is there called *lyra;* and the same designation occurs still about a century or two ago for some Italian instruments played with a bow, such as the *lira da braccio* and the *lira da gamba*. Likewise the modern Greeks have a three-stringed fiddle which they call *lyra*, and which resembles the *rebab*.

In fact, the difficulty of tracing the diffusion of the *rebab* through different European countries is chiefly owing to the various names which were given to it in the course of time, when it experienced modifications in its shape. The ancient *rebab* described by Al-Farabi, the famous Arabic musician, who flourished about the year 900, had two strings. A two-stringed species is still in use in the Barbary States. The latter instrument is constructed with a rectangular head, similar to that which constituted a characteristic and picturesque feature of our antiquated lute. The annexed engraving is a reduced copy from an illustration given in "Esquisse Historique de la Musique Arabe, par Alexandre Christianowitch" (Cologne, 1863), and obtained from a drawing of the

instrument made by a French artist in Algiers. It will be observed that the sides of the body are scooped out. This is not the case with a similar two-stringed *rebab* which the Khedive of Egypt has given to the South Kensington Museum. The body of the latter specimen is oval without the slightest indentations. The length is nineteen inches. No doubt this oval shape, or rather boat shape, is the older of the two; but, as an illustration of the Khedive's instrument is given in the descriptive catalogue of the musical instruments in the South Kensington Museum, musical antiquaries will probably be more interested in the present variety from Algiers, which, moreover, appears to be also popular in

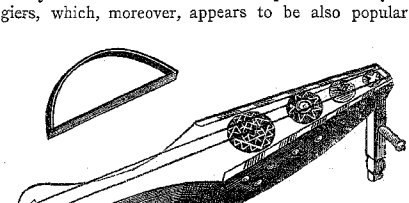


Fig. 19.—Rebab: Barbary States.

Morocco, to judge from a specimen which an English gentleman brought to London from the province of Suz, Southern Morocco. With the exception of the indentations, there is no difference in the shape and construction of the several specimens adverted to which I have seen.

The three-stringed *rebab* likewise appears to have been in use at an early period with the Moors in Spain. In a poem by Thibaut, king of Navarre, written about the year 1230, the manuscript of which is preserved in the Bibliothèque Nationale at Paris, we find an enumeration of the musical instruments in use at that time; and among them is the *rebel*, which, to judge from its name and from the way in which it is mentioned with other instruments, is evidently

the *rebab*. This may also be affirmed of the *ravé*, or *rabé*, alluded to in a Spanish poem by Juan Ruiz, Archipreste de Hita about the year 1330. The expression "El ravé gritador con su alta nota," which occurs in this poem, suggests that the sound of the instrument must have been rather shrieking; and the allusion to a *rabé morisco* in the same stanza shows that there were in the beginning of the fourteenth century at least two kinds of the *rebab* in Spain, one of them being regarded as appertaining especially to the Moors. The interchange of the letters "b" and "v" occurs not unfrequently in Spanish, the former being pronounced almost as softly as the latter. The poem by the Archipreste de Hita contains a long list of the musical instruments popular in Spain in the beginning of the fourteenth century. It is too comprehensive for insertion here. The reader, should he wish to examine it, and to convince himself of the correctness of the present statements, may be referred to "Historia de la Musica Española, par Mariano Soriano Fuertes," Vol. i., p. 105 (Madrid, 1855), which contains a more exact reprint of the poem than is to be found in some other publications.

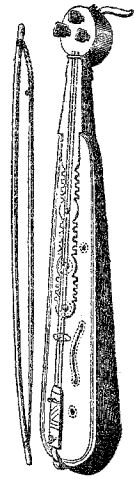


Fig. 20. Rebab: Persia.

The three-stringed *rebab* still in use with the Arabs and Persians has evidently retained intact all its former characteristics. A specimen which is in my collection of musical instruments measures about twenty inches in length, and is cut out of a single piece of wood. It is rudely ornamented with a pattern burnt on the body. The strings run through holes near the top, and are fastened at the back to the tuning-pegs. This specimen is an exact counterpart of the *rebec* formerly popular in Western Europe.

The illustration on page 85 represents a fine specimen of a Persian three-stringed *rebab* still in use. The shape of the instrument is of the old type; but the neck is provided with a special fingerboard, which is not the case with the most ordinary *rebab*.

It appears strange that Fétis should have remained unacquainted with this kind of *rebab*, which represents the old species originally introduced into Europe. He mistakes for it the square-shaped *rebab-esh-sha'er;* and most of the subsequent writers on the subject have adopted his explanation without further comment. Take, for instance, the description and illustration of the *rebab* in Abele's treatise on the violin, or the statement of Dr. Schebek, in his essay on the violin manufacture in Italy. The latter points to the *rebab* of the Javanese as representing the instrument in question, while even a superficial acquaintance with the Asiatic instruments played with a bow would have convinced him that the Javanese *rebab* is a variety of the *kemangeh-a-gouz* introduced into Java by the Arabs. Like the *kemangeh-a-gouz*, the *rebab-esh-sha'er*, and the *rebab-el-mughanee* of the Arabs, the Javanese *rebab* may be regarded as a sort of eastern violoncello, since these instruments are placed in a perpendicular direction before the legs. They are for this purpose provided with a rod serving as a foot to support them.

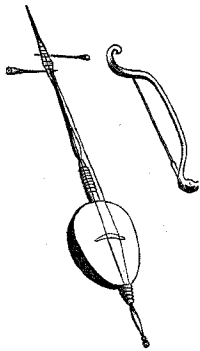


Fig. 21. Rebab: Java.

It may prevent further misapprehension if illustrations of these instruments are here inserted, with short descriptions, which I have had the opportunity of carefully examining.

The Javanese *rebab* is an elegant instrument, measuring about three feet in length. Its two tuning-pegs are eight inches long. They are usually made of ivory neatly turned,

and the same is the case with the neck and the foot of the instrument. The back of the body generally consists of a portion of a cocoa-nut shell, and is perforated with nine small soundholes placed together in the figure of a cross. The belly is of parchment. The instrument is usually played by the leader of the band in a Javanese orchestra; but it is not found with those tribes in Java who have had little inter-

Fig. 22. Kemangeh-a-gouz: Persia.

course with the nations of Western Asia. The latter circumstance affords an additional evidence to those suggesting that the Javanese *rebab* was derived from the Arabs and Persians.

The *kemangeh-a-gouz* is to be found in Persia, Arabia, Syria, Egypt—in fact, in almost every country where the Mohammedan faith has been established. The Persian specimen, of which an engraving is here annexed, is also

sometimes called *rebab*. Its body consists of half a cocoa-nut shell, covered at the top with bladder or thin skin, and being perforated at the back with a number of soundholes. It generally measures about three feet in length, and is not unfrequently tastefully embellished with designs in gold on a green ground. The Persian *kemangeh-a-goux* has generally three strings of horsehair. That of the Arabs, Syrians, and Egyptians is usually two-stringed, each string containing about sixty black horsehairs, which are not twisted together, but run parallel, like the hairs of a violin bow. Attention must be drawn to the peculiar manner in which the player holds his bow, shown in the present illustration. It must be remembered that the holding of the bow by our violinists and violoncello-players is comparatively modern; at any rate, the viola-da-gamba players about two centuries ago still grasped the bow somewhat in the oriental fashion.

Fig. 23. Rebab-esh-sha'er: Egypt.

The *rebab-esh-sha'er* hardly requires a further description, since the illustration here given sufficiently indicates its construction. The body of the *rebab-esh-sha'er* consists of a wooden frame, over which a parchment is stretched, both on the back and front, and which terminates in an iron foot on which it rests. It is usually mounted with only one string, consisting of a number of black horsehairs; but it is usually constructed with two tuning-pegs, to enable the player to add a second string at his option. The *rebab-esh-sha'er* is principally used to accompany the recitations of the "sha'er," or poet, in the Egyptian coffee-houses: hence its name, which signifies "the poet's viol." The *rebab-el-mughanee*—*i.e.*, "the singer's viol"—before adverted to is a two-stringed instrument almost identical with the *rebab-esh-sha'er*, and is used by poor perambulating singers to accom-

pany the voice. It is tuned in the interval of a fourth, thus—

while, on the other hand, the accordatura of the *kemangeh-a-gouz* exhibits the interval of a fourth downwards, thus—

Moreover, there are some other oriental instruments of the *rebab* family which, as they appear to be less old and less popular than those here mentioned, it is unnecessary to include in the present discussion.

The following notation will convey to the reader an idea of the peculiar treatment of the *rebab* when used in accompanying the voice. The tune has been obtained from the Arabs in Egypt:—

I should not venture to maintain that some Arabic fiddle resting on a rod when played upon was not introduced into Western Europe by the Moors. All I desire to point out is that the usual opinion of our musical historians, according to which the *rebec* was derived from such an instrument, is unfounded, and would probably never have been asserted had the old Arabic instruments played with a bow been properly known to the historians.

The kind of *rebab* which in Europe became known as the *rebec* represents, so to say, the violin. The player held it before his breast. Its original shape is shown in a three-stringed *rebec* depicted in a manuscript containing a German translation of the Psalms by Labeo Notker, and dating from the tenth century. The illustration in which it is introduced is a pen-and-ink drawing representing King David playing with a plectrum a seven-stringed lyre, while four attendant musicians accompany him with the harp, cither, dulcimer, and *rebec*. I have not seen this manuscript, which is said to be preserved in the library of St. Gallen, but H. Abele, in his little book on the violin, gives an illustration of the *rebec* copied from it. (See Fig. 24). The instrument closely resembles the oval *sordino*, also called *pochette*.

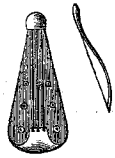


Fig. 24.—German Rebec: Tenth Century.

The following allusions to the *rebec*, occurring in English literature, deserve the attention of the musical student:—

G. Chaucer ("The Freres Tale;" fourteenth century):—

> Brother, quod he, her woneth an old rebekke,
> That had almost as lefe to lese hire nekke,
> As for to yeve a peny of here good.

Charles Richardson, who, in his Dictionary of the English Language, quotes the above stanza, remarks: "Tyrwhitt cannot guess how the name *rebekke* was given to an old woman, unless from the shrillness of the instrument."

Without assuming to correct the lexicographers, I venture to suggest another explanation. At the time of Chaucer, the *rebec* used to be ornamented in England with a carved face at its upper termination. This grotesque embellishment was even more common on the *cither*, or *cittern*, and there are jests and puns about it in the literature of the time of Shakespeare. For instance:—

Shakespeare ("Love's Labour Lost," act v., sc. 2.; sixteenth century):—

> *Holofernes.* I will not be put out of countenance.
> *Biron.* Because thou hast no face.

Holofernes. What is this?
Boyet. A cittern head.
Dumain. The head of a bodkin.
Biron. A death's face in a ring.

John Marston ("The Scourge of Villanie;" sixteenth century):—

Shall brainlesse cyterne-heads, each jobernole,
Pocket the very genius of thy soule?

John Ford ("Love's Melancholy," act ii., sc. 1; about 1630):—

C. I hope the chronicles will rear me one day for a head-piece.
Rh. Of woodcock, without brains in 't; barbers shall wear thee on their citterns.

Philip Massinger ("The Old Law," act iv., sc. 1; about 1630):—

Gnoth. And you have pipes in your consort, too.
Draw. And sack-buts too, sir.
But. But the heads of your instruments differ; yours are hogs-heads, theirs cittern and gittern heads.
Bail. All wooden heads; there they meet again.

Halliwell, in his "Dictionary of Archaic and Provincial Words," has the term *cittern-headed*, with the definition: "Ugly; in allusion to the grotesque figures with which the cittern was ornamented." And Nares, in his "Glossary," remarks: "A similar allusion to the head of a rebec was current in France." In Gargantua's lamentation for his wife Badebec, we read:—

Dead is the noble Badebec,
Who had a face like a rebec;

on which the note is: "A grotesque figure, or monstrous chimerical face, cut in the upper part of a rebec, which is a three-stringed fiddle."

The same kind of whimsical ornamentation was afterwards adopted on the *viola-da-gamba*, *viola-di-bordone*, and even still later occasionally on the violin and violoncello.

The term *ribible*, which occurs in the following example,

is generally supposed to designate a diminutive *rebec;* however, the expression "a small ribible" does not exactly agree with this conjecture, since the adjective appears unnecessary:—

G. Chaucer ("Canterbury Tales;" fourteenth century:—

> In twentie maner coud he trippe and daunce,
> After the schole of Oxenforde tho,
> And with his legges casten to and fro,
> And plaie songes on a smale ribible.

In all likelihood, *ribible* is a diminutive of *rebel,* which occurs, as we have seen, in a poem by Thibaut of Navarre, a century earlier than Chaucer's "Canterbury Tales." The substitution of *nubelle* for *rebel* by most of our musical historians who quote Thibaut's poem is unwarranted. This has been already pointed out by A. W. Ambros, in his "Geschichte der Musik," Vol. ii., p. 507. It would not have happened, were not most of our writers on musical subjects mere compilers.

Joseph Strutt, in his "Sports and Pastimes of the People of England," Book iii., chap. 3, narrates an anecdote recorded in a manuscript of the fourteenth century, in which the *ribible* is alluded to. The manuscript, which is supposed to have been written in the reign of Edward III., is in the British Museum (Harl. MS., 1764). The minstrels at that time wore a peculiar garment, described as "a coat bardy, cut short in the German fashion." A vain young gentleman, dressed in a similar garb, makes his appearance at a feast where many of the nobility are present, and is asked by an elderly knight to whom he is well known: "Where, my friend, is your fiddle, your ribible, or such like instrument belonging to a minstrel?"

Mutatis mutandis, the same scene may occur again in the present century. R. Nares, in his "Glossary," expresses the opinion that the English term *rebec* is a derivation from the Italian *ribeca,* or *ribeba,* and he refers the reader to a statement in Hawkins's "History of Music," vol. ii., p. 86, according to which the *rebec* came to England from Spain, through Italy. However, it may have been obtained direct

from Spain, as appears to have been the case with the "morris-dance," or Moorish dance; indeed, the derivation of *ribible* from *rebel* suggests this.

Again, the *ribus*, in the following example, is probably the *rebec*:—

"The Houlate" (Scotland, 1450):—

The rote and the recordour, the ribus, the rift.

W. Dauney ("Ancient Scottish Melodies," Edinburgh, 1838, p. 95), who admits his inability to define the *ribus* and the *rift*, gives some interesting account of the *rebec*, remarking that it was very common in Scotland during the sixteenth century; and in proof of his assertion he cites the following passage from Brantome's "Dames Illustres," where the author describes Queen Mary's reception by her Scotch subjects at Holyrood House, on her arrival from France. Brantome accompanied her, and was no doubt an eye-witness of the scene: "Estant logée en bas en l'Abbaye de l'Islebourg, vindrent sous la fenestre cinq ou six cents marauts de la ville, luy donner aubade de meschants violons et petits rebecs, dont il n'y en faute en ce pays là; et se mirent à chanter pseaumes, tant mal chantez et si mal accordez, que rien plus. He! quelle musique, et quel repos pour sa nuit!" ("After she had been settled in the lower storey of the Abbey of Isleburgh, there appeared under her window about five or six hundred low fellows of the town to give her a serenade, with miserable violins and small rebecs, of which there is no lack in that country; and they began to sing psalms, so badly executed, and so wretchedly in harmony, that nothing could be worse. Alas! what music, and what a rest for that night!")

Furthermore W. Dauney remarks: "A tabaret, a luyte and a rebecc constituted the musical establishment of the Earl of Northumberland, in the reign of Henry VIII.; and in the list of the household bands of Edward VI. and Elizabeth provision is made for a rebecke one or two in number, distinct from the vyalls, who were a more numerous body consisting of eight performers."

The following examples require no further comment:—

Sir Thomas Elyot ("The Governor;" 1531):—

That it [daunsynge] was none other but a counterfayting with the feete and handes of the armonye that was shewed before the rebecke, shaline, and other instrument.

Michael Drayton ("Eclogues;" about 1600):—

And being shrouded in a homely coat,
And full of sorrow (I him sitting by),
He turn'd his rebeck to a mournful note,
And hereto sung this doleful elegy.

John Milton ("L'Allegro;" seventeenth century):—

When the merry bells ring round,
And the jocund rebecks sound
To many a youth and many a maid,
Dancing in the checker'd shade.

The rebec seems not to have been highly appreciated in the time of Shakespeare, to judge from the names given to the three clownish musicians in "Romeo and Juliet," which are Simon Catling, James Soundpost, and Hugh Rebeck.

Although the *rebec* was also known in Germany, it would appear that it soon obtained there the name of *geige*.

THE GEIGE.

THE earliest German *geige* of which we possess illustrations was a three-stringed fiddle of the oblong oval shape which characterises the *rebec* and the *rebab* of the Arabs. It is, for instance, thus depicted by Luscinius, Agricola, and some other German writers of the sixteenth century. The *geige* was, however, a decided improvement upon the common *rebec*, inasmuch as its neck had the addition of a broad fingerboard, which extended over the upper part of the soundboard. In the illustrations alluded to the fingerboard is represented without frets, which is noteworthy, because almost all other stringed instruments with a neck and a fingerboard were provided with frets. This three-stringed specimen soon obtained the appellation of *kleine-geige*, to distinguish it from another sort of fiddle which was called *grosse-geige*. The latter instrument had indentations at the sides, and its outward appearance was entirely different from that of the former.

Illustrations of both these instruments, copied from the work of Lucinius (Strasburg, 1536), are given in Hawkins's "History of Music," Vol. ii., Book iv., chap. 4. However, the *grosse-geige* is perhaps incorrectly drawn, since its nine strings, unsupported by a bridge, could not in this state have been played upon with a bow. The instrument was provided with seven frets on the fingerboard, and it used to be manufactured in different sizes for the performance of vocal music, to assist the four voices, soprano, alto, tenor, and bass.

Subsequently, we find the term *geige* in Germany applied to almost every instrument of the fiddle kind—as, for

instance, *kniegeige*, the viola-da-gamba; *liebesgeige*, the viola d'amore; *discantgeige*, the violin; *armgeige* or *aligeige*, the viola-di-braccio, &c. In fact, at the present day, the violin is very usually called *geige* by the Germans. We have here, again, a remarkable example, showing the transmission of the designation of one musical instrument to another. I have already drawn attention to these frequent changes as occasioning one of the chief difficulties in tracing accurately the history of certain instruments which are now highly popular with us.

The word *geige* does not occur in the German language, as far as is known, until about the year 1200. At that time it was, in Middle High German, called *gîge*.

Wolfram von Eschenbach ("Parcival;" thirteenth century): "Ern ist Gîge noch din Rotte."

Gottfried von Strassburg ("Tristan;" thirteenth century): "Ir Gîge unde ir Rotte."

Almost all our musical writers state, as if it were a well-ascertained fact, that the German word *geige* is derived from *guige* of the French ménétriers, or minstrels, who, during the thirteenth and fourteenth centuries, had a sort of *rebec* which they called by that name, and which, according to some commentators, resembled in outward appearance the shank of a goat or ram, called *gigot*, or *guigua;* and hence the origin of all the similar words occurring in different European languages. These commentators have, however, neglected to prove that the old French word *guige;* designating a sort of *rebec* or fiddle, occurs before the thirteenth century, or that it is earlier than the Middle High German *gîge*.

Others point to the Low German *gigel*, "to make an up-and-down motion;" but this word, if it alludes to the movement of the fiddle-bow, may have been derived from the substantive *geige*, designating the musical instrument.

Again, some scholars suppose the German word to have been derived from the Norse, or ancient Scandinavian, *geiga*, "to tremble," as the fiddle-bow is often drawn over the strings with a short and quick motion. This conjecture appears to be in some measure supported by a remark made

by Jacob Grimm ("Kinder und Hausmärchen," Vol. iii., p. 192, Göttingen, 1856), who, in speaking of the musical powers of a Scandinavian enchantress called Gygur, says that the word *geige* is perhaps derived from the name of this mythical being. The Swedes at the present day have the word *giga*, or *mungiga*, signifying the Jew's-harp. According to Halliwell's "Dictionary of Archaic and Provincial Words," the country people in some districts of the north of England call the Jew's-harp *gew-gaw*, which is perhaps a corruption of the French *joujou*, if it is not the German *geige;* or it may be, possibly, from *jaw*, as also Jew's-harp—*jaw's-harp*, because it is placed to the jaws when played upon.

Again, Albert Sowinski ("Les Musiciens Polonais," p. 51, Paris, 1857) maintains that the word *geige* is derived from the Slavonic languages. The Poles and some other Slavonic races had the word *guiga*, or *guigua* (derived from *genga*). In the course of time it passed into the German language, where it became *geige*. The Slavonic races, he asserts, had it "in olden time," but, as he does not state the century to which it can be traced back with them, his assertion is of but little use.

If the English word *jig* ever meant a musical instrument, it must have been at an early period, since it has not this meaning in the classical literature of England, but generally signifies a certain merry dance, which may possibly have obtained its name from being usually danced to the music played on a sort of fiddle called *jig*, just as the *hornpipe* and the French *musette* obtained their names from certain musical instruments which were almost invariably played with these dances. The English word *jig* had some other meanings besides, which it is unnecessary to notice here. Suffice it to point out that most of the lexicographers identify it with the French *gigue* and the Italian *giga*. C. Richardson derives it from the Anglo-Saxon *gangan*, "to go," and he remarks: "*Gig*, or *jig* (German, *geige;* Dutch, *ghiighe;* French, *gigue;* Italian *giga*), a musical instrument (*fides*) is derived by Wachter from *geigen*, or *jucken* (*fricare*), to rub or scrape. A *gig* or *top*, by Junius, from *geige*, the musical instrument."

As regards the German verb *jucken*, which was, according

to Daniel Sanders, in Old High German, *jucchan*, and in Middle High German, *jucken*, this word is more likely affined with *zucken* than with *geigen*. The meaning of *zucken* is "to draw with a short and quick motion, to shrug, to shrink."

In discussing the *rebec*, I have already drawn attention to a one-stringed fiddle which is depicted in Gerbert's "De Cantu et Musica Sacra," and which is generally believed to have been copied from a manuscript dating from the ninth century. I have some hesitation in expressing scepticism about the date assigned to Gerbert's illustration. I am rather inclined to accept it, because almost all our learned musical historians think it to be correct, and I am unable to prove decisively that it is incorrect. I venture, therefore, only to remind the reader that the illustrations in Gerbert's work are copied from different manuscripts, some being from the monastery of St. Emmeran, and others from the monastery of St. Blasius. That these manuscripts date from different centuries is evident from a statement in Gerbert's work (Vol. ii., p. 139) referring to two instruments, of which illustrations are given, copied from two different manuscripts to which Gerbert assigns respectively the ages of eight hundred and five hundred years.

However, it is not the indication of these inventions which suggests a later period; the instruments existed probably at the period assigned to them as we find them here depicted. The difficulty is to accept the age of the one-stringed fiddle. If I were to form an opinion from its appearance, I should assign this instrument to a period not earlier than the twelfth century. The illustration represents an improved *rebec* resembling the *geige*. The shape of the bow depicted with it is less primitive than that which is represented with the Anglo-Saxon *fithele* of the eleventh century, of which presently some account will be given; and it is decidedly superior to the crooked shape of the rude bow depicted with the French *crout*, of the eleventh century, which has previously been noticed. The neck of the instrument is narrower in shape, more resembling that of the viol than did the neck of the *rebec*. It has a proper fingerboard, with which the *rebec* was not provided. The circumstance

of its having only a single string is no proof of a high age. One-stringed fiddles were still in use in the fourteenth century, to judge from a passage in a musical treatise by Joannes de Muris, quoted by A. W. Ambros ("Geschichte der Musik," Vol. ii., p. 32). In fact, the *kleine-geige* which Sebastian Virdung, in the beginning of the sixteenth century, describes as having usually three strings, and sometimes only one or two, exhibits all the characteristics of Gerbert's instrument. It has no frets on the fingerboard, and its two soundholes are of a crescent shape, precisely as is the case with that declared to be of the ninth century. The illustration of the *kleine-geige* which is here given from Martinus Agricola's "Musica Instrumentalis" is almost exactly like the woodcut of the instrument in Sebastian Virdung's "Musica getutscht und ausgezogen" (Basel, 1511). It represents the German *geige* as it was in popular use during the fifteenth century, and probably at an earlier period.

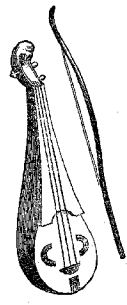


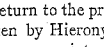
Fig. 25. — Kleine-Geige, about anno 1500.

It would be interesting, and probably also suggestive, to know exactly the musical intervals in which the strings of these various kinds of fiddles were tuned. In examining the old records about them, the student encounters several difficulties. Not only the order of intervals, or the *accordatura*, on some of these instruments appears to have been altered in different centuries, but also several nations appear to have had their own peculiar arrangement of intervals. Moreover, it would seem that on some of these instruments the performers not unfrequently followed their own fancy or convenience in tuning the strings to facilitate the execution of some particular composition. In fact, this expedient is still occasionally adopted by violinists. It certainly was resorted to by Johann Sebastian Bach, as may be seen by an examination of his compositions for the violoncello. In

the present century, Paganini especially is said to have sometimes adopted an extraordinary *accordatura* on the violin. In short, it may be surmised that in mediæval time, when our stringed instruments played with a bow were still in the stage of infancy, an arbitrary arrangement of the intervals produced by the open strings was not uncommon; howbeit, there appear to have been certain rules for observance which are worthy of scrutiny.

I purposely did not touch upon this subject until now, because the notations illustrating it are more interesting if placed together as much as possible, and this could not be done before some account of the *geige* had been given. Let us now for a moment return to the primitive *geige* called *rebec*.

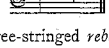
In a treatise written by Hieronymus de Moravia, in the thirteenth century, the manuscript of which is in the Bibliothèque Nationale at Paris, a two-stringed *rubeba* (*rebab*, *rebec*) is described as being ordinarily tuned in the interval of a fifth :—



The compass of the obtainable tones on this *rubeba* extended above an octave, thus :—

We have seen already that the *rebec* was made of various sizes; indeed, some of the names applied to it, which have previously been noticed, suggest a diminutive specimen. It may therefore be surmised that the pitch of sound was in some *rebecs* higher than it is indicated in the above notation.

The two-stringed *rebab* still in use in the Barbary States, especially in Algiers and Tunis (see the engraving, Fig. 19, on page 84) has very thick catgut strings, which are tuned in the interval of a fifth, thus :—



As regards the three-stringed *rebec*, I doubt whether the tuning in two fifths, as given by Fétis, in his "Histoire Générale de la Musique," thus—

has ever been much in use. The highest string most likely was ordinarily tuned in the interval of a fourth above the second string, thus:—

At all events, this arrangement is more in conformity with those generally to be found on the stringed instruments of the Arabs; and indications are not wanting as to this having been a common arrangement also on the European instruments obtained from the Arabs.

Thus—to notice only one example—the lute, when it became popular in Europe, had ordinarily only eight strings, tuned in four pairs, producing the following tones—

Subsequently a fifth tone was added at the top, thus—

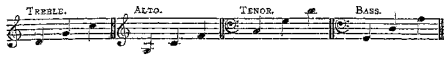
The highest of these five intervals (generally produced by a single string, and sometimes by a pair of strings tuned in unison) was called in French the *chanterelle*, and in German the *quinte*. The latter designation is still used for the highest string on the violin, and is generally supposed to have been adopted from the circumstance that the E string is tuned a fifth higher than the A string. This supposition is, however, erroneous. The term is derived from the fifth and highest string on the old lute; it was always retained with reference to the *accordatura* of the lute, even when, in the course of time, a greater number of strings came to be used on the instrument than the number indicated in the present notation. Now, I think I shall be able to convince the reader that the arrangement of the intervals produced by the open strings of our mediæval instruments played with a bow was generally similar to that of the lute. It was, in fact, more or less adhered to, until the violin came into use.

Respecting the compass of tones obtainable on the instruments popular in the later centuries of the middle ages, some of the recorded statements which at a first glance appear to be in contradiction with known facts, are explicable if we bear in mind that most of the stringed and wind instruments of that period were made of three or four sizes, in order to render their pitch of sound in conformity with the different human voices. In fact, this contrivance has remained in practice until the present day, although during the last two centuries instrumental music has to a great extent, so to say, emancipated itself from vocal music, and has become an important branch of the art, claiming an independence which during the middle ages it can hardly be said to have possessed.

Although the descriptions of the *kleine-geige* and of the *grosse-geige* given by Martinus Agricola, in his "Musica Instrumentalis," date only from the year 1529, there is reason to surmise that the *accordaturas* given by him are the same which were in use during the later centuries of the middle ages; at all events, no earlier ones have been transmitted to us which can be accepted with equal confidence. Agricola describes the *kleine-geige* as being tuned in fourths or in fifths. No doubt the former *accordatura* was the older of the two. The instrument was made of three different sizes: the smallest being called *diskant-geige;* the next in size, *alt-geige,* or *tenor-geige;* and the largest, *bass-geige.* Likewise the *grosse-geige* (Fig. 26) was usually made of three sizes; occasionally of four. Agricola calls this instrument also *welsche-geige,* a designation which indicates that it was supposed to have been obtained from Italy. It was, in fact, the mediæval *viol.* It had frets on the fingerboard; but instead of being mounted with nine strings, it usually had only five strings, except the largest kind of the *grosse-geige,* used for the bass, which had six strings. The *accordatura* was in fourths, with the interposition of a major third, much in the same way as that of the lute, which is also still retained on the guitar. Moreover, both the *grosse-geige* and the *kleine-geige* were not unfrequently constructed with four strings.

Fétis, in his "Histoire Générale de la Musique," Vol. v.,

p. 167, gives the following notations of the open strings of the *gigue;* but, as he does not distinctly state the century to which they refer, nor the source from which he has obtained them, I should not venture to guarantee their correctness :—



The non-existence of the bridge on the nine-stringed* *grosse-geige* in the illustrations by Agricola, Virdung, and Luscinius is supposed by some modern antiquaries to be owing to an oversight. However, some closer investigation will probably induce the student to hesitate in accepting this opinion. Agricola especially, it might be supposed, was too experienced a musician to leave the engraving uncorrected in the second edition of his work, published in 1542, if a mistake had been made by an oversight in the first edition, which appeared in 1529. Both editions represent the *grosse-geige* without a bridge. No doubt, this instrument was chiefly used for producing chords serving as an accompaniment to vocal music. Hence also the frets, which enabled the player

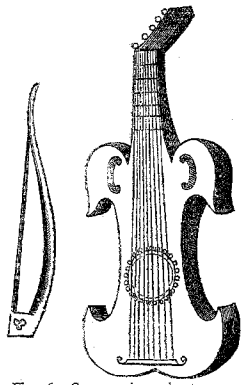


Fig. 26.—Grosse-geige; about anno 1500.

* It must be understood throughout this passage that Mr. Engel means the non-existence of a violin or raised bridge. A guitar or level bridge is shown on the drawing, with the exception of the fine edge over which the strings have their bearing; too small a detail, as was also the attachment of the strings, for the draughtsman to notice.—A. J. H.

to obtain the correct intonation of several intervals sounded simultaneously without the necessity of his placing his fingers precisely at the spots which yield these intervals. For the same reason the immediate precursors of the violin were usually supplied with frets. The treatment of these instruments was, in fact, very different from that of our present instruments played with a bow. Their fingerboard was constructed especially with the aim of facilitating the production of harmonious combinations, since concord was often more thought of than simple expressive melody.

It is rarely that the name of an Asiatic musical instrument can be traced to a European origin. There are, however, one or two instances in which this seems to be possible. Thus, the Chinese name *ye-yin*, by which they occasionally designate their fiddle, may possibly be a corruption of *giga*, or *geige*, considering that the common name of the Chinese fiddle is *urheen*, and that Macao, where this instrument is said to be called *ye-yin*, has been above three hundred years in the possession of the Portuguese, and is a seaport town in constant communication with European nations. But the dictionaries of the Japanese language have the word *yeiji*, signifying "to sing," and it is by no means improbable that a similar word is to be found in the old Chinese language, and that the name of the instrument can be traced to it. Be this as it may, it is certainly always hazardous to jump at conclusions from observing resemblances of names applied to musical instruments of different nations like those under consideration. At all events, if accidental coincidences had been duly taken into account, some of the misapprehensions respecting our mediæval instruments played with a bow found in our musical literature would probably have never arisen, or would at all events have been dispelled before this time.

THE FIDDLE.

THE designation "fiddle" is generally explained as having been derived from the Latin *fidicula*, a stringed instrument mentioned by Cicero, who states ("De Natura Deorum," Book ii.) that it was made of the wood of the plane-tree. Although *fiddle* may possibly be a derivation from the Latin *fides*, denoting "string," and also "stringed instrument," and of which *fidicula* is the diminutive, there can hardly be a doubt that a Roman instrument called *fidicula* was known to the higher classes of people in central and western Europe long before they applied the bow to its strings.

As regards the form and construction of the *fidicula*, the inquirer has to encounter most contradictory statements, which prove, if anything, merely the fact that nothing certain is known about this instrument. Some writers conjecture that it had a neck like the lute, others that it resembled the lyre. Furthermore, according to some historians, the Romans possessed an instrument of torture, constructed with cords, which they called *fidicula*. Can this be ironically meant for a rude fiddle? The Germans had formerly a contrivance called *fiedel*, which constituted the first or mildest degree of torture. A string with a noose fastened round the elbow was drawn to and fro.

Our musical historians, about a century or two ago, were rather inclined to attribute the invention of the violin to the nations of antiquity. Wolfgang Caspar Printz, in his "History of Music" ("Historisch Beschreibung der edelen Sing- und Kling-Kunst," p. 28, Dresden, 1690), gives illustrations of three Hebrew instruments more or less resembling the violin, or rather the mediæval viol—viz., the *minnim*,

michol, and *schalisim*—which are represented with fiddle-bows, and he depicts these instruments with carved human faces, or "cittern-heads," by way of ornamentation. F. W. Marpurg ("Kritische Einleitung in die Geschichte und Lehrsätze der alten und neuen Musik," p. 32, Berlin, 1759) likewise mentions these three instruments as Hebrew fiddles; however, he further improves upon Printz's fanciful designs by adopting in his illustrations the proper indentations of the sides of our violin. Furthermore, he maintains that the *barbitos* of the ancient Greeks was such a fiddle, and that it was of Persian origin. Sir John Hawkins ("History of Music," Vol. iii., Book i., chap. 1), after having quoted the opinion of Athanasius Kircher respecting the employment of the bow with those Hebrew instruments, expresses a doubt whether the illustrations may be accepted as authentic. On the other hand, he has no scruple about the authenticity of a Roman representation of a supposed Apollo with a fiddle, which he gives in Vol. i., Book ii., chap. 9, with the statement: "Upon this relic of antiquity, a drawing whereof was found in the collection of the late Mr. N. Haym, it is observable that the lyre is of a form nearly resembling the violin, as having a body, and also a neck, which is held in the left hand; the instrument in the right hand, no doubt, answers to the modern bow, with this difference, that its use was percussion and not friction, which latter is a modern and noble improvement. The position of the instrument deserves to be remarked, as it corresponds exactly with the viola-di-braccio."

Dr. Burney ("History of Music," vol. i., p. 493) remarks: "The little figure of Apollo playing on a kind of violin, with something like a bow, in the Grand Duke's Tribuna, at Florence, which Mr. Addison and others supposed to be antique, has been proved to be modern by the Abbé Winkelmann and by Mr. Mings. So that, as this was the only piece of sculpture reputed ancient in which anything like a bow could be found, nothing more remains to be discussed relative to that point." With respect to Roman instruments with a neck, Burney says: "There is, in an antique painting in the collection of William Lock, Esq., which consists of a

single figure supposed to be a Muse, an instrument nearly in the form of a modern violin, but the neck is much longer, and neither bow nor plectrum is discoverable near it." Laborde ("Essai sur la Musique," Vol. i., p. 295, Paris, 1780) gives an illustration of Orpheus playing on a fiddle to the delight of lions and other ferocious animals, and this picture he states to be after an antique sculpture.

Several other evidences of this kind could be cited, most of which have been proved to be either spurious, or genuine antiquities altered by modern restorers. Nevertheless, some musical historians are inclined to believe that the *fidicula* was played with a bow. Others conjecture the same of the *magadis*—probably influenced by the opinion of Giovanni Battista Doni, who, in his musical tracts written about the middle of the seventeenth century, maintains that it resembled the *viola-di-bordone*, which has drone-strings running at the side of those played with the bow.

These opinions deserve only a passing notice, since they are not supported by well-ascertained facts. However, as regards stringed instruments provided with a neck, by means of which the player can produce different intervals with his fingers, it hardly admits of a doubt that not only the Romans but also the Greeks and Hebrews possessed such instruments. At any rate, the ancient Egyptians had instruments of the lute kind. One of these occurs represented in hieroglyphic inscriptions, which are stated by our learned Egyptologists to have been written about two thousand years before our Christian era. This points to a very high antiquity of the instrument. Its figure in these writings denotes *nofre—i.e.*, "good" or "pleasant"—which shows that the instrument was held in esteem at a very early period; indeed, it must have been a particular favourite, since it was used to represent that meaning in preference to any other musical instrument.

Another kind of lute which not unfrequently occurs depicted on the ancient Egyptian monuments has an extraordinarily long neck, and closely resembles the *tanbour* or *tamboura*, still in use with the Arab-Egyptians. It would require too much space here to give a detailed description of the

highly interesting representations alluded to. I shall therefore confine myself to drawing attention to some curious facts observable on them, which show that certain peculiarities in the construction of our mediæval stringed instruments played with a bow, which are usually supposed to be of European origin, were already known to the ancient Egyptians.

Frets were known. The British Museum contains a fragment of a fresco from an ancient Egyptian tomb on which are depicted two instruments of the kind in question. The frets are distinctly marked on the long neck. Furthermore, there is in the British Museum an ancient Egyptian vase in terra-cotta which represents a female playing on the long-necked *nofre*, whereon the frets are distinctly marked over the whole neck.

Indentations of the body were known. Generally the form was oval; however, in one or two of the representations, the sides of the body appear to be slightly incurved, somewhat like those of our guitar. As the bow does not occur with the instrument, the indentations can have been of no material use, and were probably only occasionally adopted for the purpose of giving the instrument a more elegant shape; or, perhaps, the slight incurvations shown in one or two of the published illustrations may be owing to an accidental inaccuracy in the drawing of the copyist.

The so called "cittern-head" was known. Not only the ancient Egyptian harps were frequently embellished with a carved human head, but the same peculiar ornamentation occurs also on the *nofre*.

Considering that the Hebrews obtained their musical knowledge originally from the Egyptians, they may be supposed to have had among their various stringed instruments at least one which was provided with a neck. This conjecture has recently been strengthened by the discovery of such an instrument among the ancient Assyrians. It is depicted on a bas-relief, which was exhumed at Birs-i-Nimroud, and which is deposited in the British Museum. The instrument is represented being played by an Assyrian musician, who accompanies two masked dancers. There are neither strings

nor tuning-pegs indicated. The latter were probably situated at the back of the neck, which would account for their not being shown. The thin lines representing the strings may have become obliterated in the course of time. Perhaps the sculpture was originally coloured, as appears to have been the case with many of the Assyrian bas-reliefs. To judge from the two appendages on the neck of the instrument, it was probably two-stringed. Moreover, the British Museum contains some small Assyrian images, formed of baked clay, which represent female players on a similar instrument. As these figures are supposed to be idols, it may perhaps therefrom be surmised that this sort of lute was especially appreciated by the Assyrians. Howbeit, there remains hardly a doubt that the instrument was well known in different districts of Western Asia about a thousand years before our Christian era, and consequently at about the time of David and Solomon. If this was the case, the Greeks and Romans also cannot have been unacquainted with it. At all events, they must have observed its representations on the Egyptian sculptures and paintings, although they may not have cared much to construct similar stringed instruments. If a sort of lute had been especially popular with the Romans, we should probably have had transmitted to us some illustrations and descriptions of the instrument.

In short, it appears highly probable that before the Arabs introduced into Europe their *el-'oud*, or lute, and their *rebab*, or *rebec*, the European nations possessed already a stringed instrument provided with a neck, and somewhat resembling in shape the violin, or, rather, the guitar. However, the opinion expressed by some of our musical historians, that the Roman *fidicula* had such a neck, appears nevertheless questionable. More likely the designation *fidicula* was occasionally used for stringed instruments in general, because it signifies also a string. There are several instances on record in which a name apparently belonging to a certain musical instrument was applied to a whole class of instruments. At the present day, Englishmen not unfrequently call a quartet of stringed instruments simply "the strings." Considering that the Latin dictionaries give *fidiculæ sonantes* for "stringed

instruments," and *fidicula* as well as *fides* (or *fidis*) for "strings," the hypothesis that the term *fidicula* was often used to denote, not a particular instrument, but a certain class of instruments, appears certainly more tenable than the present usual one, which presumes the *fidicula* to have been the prototype of the violin.

This may be the place to draw attention to a discovery which has escaped the notice of almost all our musical historians, but which is of considerable importance, especially in the present investigation. Among the sculptured relics from the ruins of the famous town Agrigentum, in Sicily, which have been rescued from oblivion, there is a sarcophagus on which two musical instruments are represented, precisely alike in form and construction, mounted with strings, but entirely different from the harp and lyre. As they are shown in somewhat different positions, the circumstance of our possessing two aspects of the same instrument greatly enhances the value of the representation. Fétis is, as far as I am aware, the only musical author who has given some account of this suggestive relic; however, his illustration of the two instruments (Histoire Générale de la Musique," Vol. v., p. 250) is incorrect on some essential points. For instance, he exhibits the strings as being provided with a sort of cover near the bridge, whereas, in reality, this seems only to be the case on one of the instruments, owing to the sleeve of the player being close to the strings.

As I am in possession of a faithful copy of the entire scene in which these instruments occur, I am able to give a detailed account of them. The sarcophagus is now in the cathedral of the town of Girgenti, in Sicily, where it serves as a baptismal font. Its present use is said to be injurious to its preservation; an exact description of it appears therefore all the more desirable to the musical antiquary. I shall endeavour to give it here in a few words. The instrument is of the oval shape, or boat shape, which characterises the kind of kit known as the *sordino*, and which is, in fact, a small *rebec*, originally constructed with three strings, later usually with four, like the violin-shaped kit. The South Kensington Museum possesses some fine specimens of the

sordino (also called *pochette*), which the reader may perhaps have an opportunity of examining. The instrument has no neck, properly speaking; its body tapers gradually towards the top, and its soundboard extends almost over the whole surface.

The same was the case with the Roman instrument in question. It measured, however, about three feet in length. There are no soundholes indicated on the belly. The strings, nine in number, are affixed to a bridge, which is fastened on the sound-board, just as it was on the lute, and as it still is on the guitar. The strings were evidently drawn through holes at the top of the instrument, and tuned by means of screws placed at the back. The upper termination of the instrument is cut in an angular shape. The back appears to have been vaulted, like that of the lute or of the mandoline. The player holds the instrument in a perpendicular position, having placed the left hand beneath the lower end of the soundboard, and uses the right hand for twanging the strings. As there are nine strings given to each of the two delineations of the instrument on the sarcophagus, it is not likely that this number is merely occurring by inadvertence of the sculptor; probably it was the one usually adopted. The two players are females: one is sitting on a sort of stool, and the other is standing. They appear to be consoling with their music a mistress, who is reclining in an attitude of distress and faintness, and who is supported by female attendants.

The sculpture, which is remarkably fine and impressive, is supposed to have been made about 250 years before our Christian era. As the Carthaginians were in possession of the town of Agrigentum before that time, the musical instrument in question may possibly be a Semetic contrivance: and this would in some measure account for its rare occurrence among the Greek and Roman instruments on other monuments; and perhaps it would also account for its close resemblance with the Arabic *rebab*, which belongs to the Semetic musical instruments. However, the figures and ornamentations on the sculpture are so decidedly Grecian that there can hardly be a doubt of the sarco-

Fig. 27 Roman Instrument; about 250 B.C.

phagus having been chiselled by a Greek or Roman artist; and, if so, the interesting instrument was most likely in use with the Romans who lived in the vicinity of Agrigentum, and who took possession of the place about the time from which the sculpture is said to date.

Another representation of the same instrument occurs on a marble bas-relief, formerly in the Villa Borghese collection at Rome, and now in the Louvre. Engravings of it are given by Bouillon ("Musée des Antiques," Vol. iii., plate 24, Paris) and by Clarac ("Musée de Sculpture," plate 202, No. 261, Paris, 1826-51). It evidently formed part of a larger sculpture, which has been lost, but which must have been a beautiful work of art, to judge from the remaining portion. It depicts two girls: one of them is playing the instrument, while the other appears to want to assist her in eliciting sweet sounds from its strings; or, perhaps, the two charming musicians are contesting the possession of the instrument. Probably the scene refers to some mythological or historical event, which would be explicable if the entire bas-relief had been preserved. Even the instrument is not perfectly shown, the upper end of the neck having been injured, so that the strings are not properly exhibited as extending to the tuning-screws. However, enough remains to convince any one that we have here precisely the same instrument which is represented on the sarcophagus from Agrigentum just noticed. According to the descriptions given by archæologists, the bas-relief containing the present design is Græco-Roman, and dates from the end of the first or the beginning of the second century of our Christian era—"an epoch," Clarac remarks, "when the arts still adhered to the principles and traditions of the good Greek school." At all events, we have here the same instrument which we know to have been in use three centuries earlier, and which in both instances we find played by females. In the present representation, the girl who is holding it appears to have in her right hand a sort of plectrum; but this is not distinctly shown. It would be interesting to ascertain whether the player occasionally shortened the strings by pressing them down on the neck of

the instrument. The circumstance of the player supporting the instrument, by having placed her left hand below it, rendered it almost impossible to use her right hand for pressing the strings down, since she required her right hand for twanging the strings. However, in the present sculpture we have two musicians and only one instrument. From the manner of touching the strings in which the girl is depicted who does not carry the instrument, it may perhaps be surmised that she is engaged in producing different musical intervals like a lutenest or a player on the guitar.

Be this as it may, there can be no doubt that the Romans on a few of their instruments employed this method for obtaining a series of tones on a single string. They had, for instance, a monochord which was thus constructed. Likewise, the *pandura* appears to have had a sort of fingerboard. Probably the *pandura* had also the lute-like shape of the present instrument; but it is recorded to have been mounted with only three strings.

The *fidicula* is supposed to have been sounded by means of a plectrum, or by being struck with rods. The plane-tree wood, of which it was made (*platanus*), appears to have been the same wood of which the violin is made, excepting, of course, the belly, which is of pine. The Germans call the plane-tree *morgenländischer ahorn—i.e.*, "oriental maple." From the German word *ahorn* is probably derived the term "air-wood" (often corrupted into "hair-wood") of the English violin-makers. Thomas Mace ("Musick's Monument," p. 49, London, 1676) says, respecting the lute: "The air-wood is absolutely the best; and next to that our English maple."

If the designation *fidicula* was really applied to a lute-like stringed instrument, of which we possess no further historical record than the allusion to it by Cicero, this may more likely be the instrument than any other known to us. The circumstance of its being depicted as twanged with the fingers instead of a plectrum does not materially affect this hypothesis, since also the *testudo* was played in either way.

But, it may be asked, what evidences are there in support of the opinion just expressed that, before the Arabs introduced into Western Europe the lute, guitar, and *rebec*, some

stringed instruments provided with a neck were already in use in Western Europe?

It would probably interest only some ardent antiquaries to have a circumstantial statement of the various evidences alluded to. However, the following intimation of the existence of such an instrument in Spain, before the Moors settled in that country, is likely to interest every musical inquirer, and will probably be accepted by him as a very suggestive example.

In the poem by the Archipreste de Hita, which, as has already been mentioned (page 85), was written in the beginning of the fourteenth century, we find, in the enumeration of the musical instruments in use in Spain at that time, two different guitars; one being called *guitarra morisca*, and the other *guitarra latina*.

In order to avoid any possible misunderstanding, I must not omit to draw attention to the fact that some musical authors, who have quoted the poem in question, spell the latter name *guitarra ladina*. For instance, Ambros gives it thus incorrectly in his musical history ("Geschichte der Musik," Vol. ii., p. 508). Now, this would hardly be worth noticing, did it not happen that the Spanish word *ladina* signifies, according to the dictionaries, "to discourse cleverly, and with facility." Musical inquirers might therefore be led to surmise that the *guitarra ladina* had its name from being regarded as having a particularly persuasive sound, and admitting of an easy treatment. This surmise would, however, be unfounded. In referring to the original Spanish source, we learn that the real designation is *latina*, and not *ladina*, as compilers give it who are apt to copy from each other without investigation.

Probably no better authority on the subject could be cited than Mariano Soriano Fuertes, who, in his "Historia de la Musica Española," (Vol. i., p. 105, Madrid, 1855), gives the poem of the Archipreste de Hita with some instructive annotations; moreover, in Vol. iv., p. 208, he refers again to the *guitarra latina*, and discusses the opinions of some previous Spanish writers about the antiquity of the instrument. From these investigations it would appear that the *guitarra*

latina was originally the *fidicula*, introduced into Spain by the Romans; and that it obtained the designation of *guitarra latina* after the Moors had introduced into Spain their guitar, which the Spaniards, by way of distinction, called *guitarra morisca* ("the Moorish guitar"). Furthermore, Hilarion Eslava, in his "Apuntes para la Historia Musical de España" (published in the "Gaceta Musical de Madrid," April 8, 1855), states that the *guitarrra latina*, before it obtained this designation, was called *vigola*, and subsequently *vihuela de mano*. We shall presently see that these names are in all probability derivations of the Latin term *fidicula*.

The conclusion that the Roman *fidicula* must have been a small instrument because its name is a diminutive of *fides*, appears rather hazardous. A *pianino* ("small pianoforte") is a large instrument compared with a violin; and a *violino* ("small viola") is a large instrument compared with a piccolo flute.

I shall add here a few remarks about the substances of which the strings of the ancient eastern instruments were made, since this subject throws some light upon the construction of the early mediæval stringed instruments before the bow was applied to them.

According to most of our musical historians, the strings of the various kinds of lyres were made of gut, or of the sinews of certain quadrupeds. However, they give no satisfactory evidence in proof of this statement. A. W. Ambros ("Geschichte der Musik," Vol. i., p. 469) says that metal strings were unknown to the ancient nations. The correctness even of this statement appears doubtful; according to Sir Gardner Wilkinson ("A Popular Account of the Ancient Egyptians," London, 1854, Vol ii., p. 82), the mode of drawing wire through holes in metal plates was not unknown to the Egyptians. He remarks, as might indeed be expected, that wire-drawing was first attempted with the most ductile metals, "gold and silver being used before brass and iron, because the wire was originally employed for ornamental purpose." At a very early period it seems to have been beaten out and rounded with a file. "Silver

wire," Sir G. Wilkinson remarks, "was already known in Egypt about three thousand three hundred years ago, being found at Thebes of the third Thotmes; nor is there any reason to suppose it was then a novel invention; and it was probably known and used nearly as soon as gold wire, which we find attached to rings bearing the name of Osirtasen I., who lived more than six hundred years earlier." Is it, then, not highly probable that the ancient nations used metal strings on some of their musical instruments?

Moreover, this conjecture is supported by a noteworthy fact stated by Villiers Stuart, in his interesting work entitled "Nile Gleanings concerning the Ethnology, History, and Art of Ancient Egypt," London, 1879. In describing a musical performance of minstrels at a feast, depicted in an ancient Egyptian wall-painting at El-Kab, the author remarks: "The musicians are all women. One is giving the time by clapping her hands; one is playing the double-pipe; a second the harp, which has twelve strings. These strings are coloured red, showing them to have been of copper." Also several other parts of the harp which must have been of metal, as for instance, nails, &c., and likewise the frame of the sistrum are usually painted red.

"The tombs of El-Kab," we are informed, "consist chiefly of a series, all appertaining to one family of the name of Ahmes. They cover a period of time beginning with the last kings of the seventeenth dynasty, about 1800 B.C., and extending through the entire of the eighteenth dynasty . . . and extend into the nineteenth dynasty. They, therefore, span an interval of about 400 years."

According to this statement, the Egyptians must have used metal strings on some of their musical instruments as early at least as 1,400 years before our Christian era.

Again, silken strings were made use of by the Chinese on some of their musical instruments as early as at the time of Confucius, about five hundred years before our Christian era, and probably still earlier. Furthermore, the employment of hair for strings of instruments of the harp kind is evidently of high antiquity. Some Caucasian tribes still use horse-hair for the strings of their harps. The Welsh are recorded to

have strung their *telyn* originally with this sound-producing substance; likewise, the Fins, on their antiquated *kantele*, used, according to their old national epos, the Kalewala, "hair from the tail of a spirited horse."

Thus also the ancient Greeks and Romans, no doubt, had various kinds of strings. Even the disagreement in their old tradition respecting the invention of the *chelys* suggests this, since its strings are said to have been made of the dried sinews of a tortoise, and also of the intestines of cattle. It may, therefore, be surmised that the several lyres known by different names were distinguished from each other, not only by certain peculiarities in construction and shape, but in some instances also by the employment of peculiar strings. In order to describe any particular Greek or Roman lyre correctly, it is necessary to ascertain first, precisely the period from which it dates.

Fig. 28.—Anglo-Saxon Fithele.

Exactly the same is the case with the mediæval fiddle, as will be seen from the following statements.

A representation of an Anglo-Saxon *fithele* is contained in a manuscript which dates from the eleventh century, and which is preserved in the British Museum (Cotton MSS., Tiberius, chap. vi.). There is not the slightest doubt about this illustration exhibiting a real instrument of the fiddle class, since the bow is depicted in it. The reader, should he have no opportunity to inspect the original illustration, will find a faithful copy and detailed description of it in Joseph Strutt's work, "The Sports and Pastimes of the People of England, from the Earliest Period to the

Present Time." This evidence alone might convince the unbiassed inquirer that there is no foundation for the usual assertion, that the Welsh *crwth* was the progenitor of the violin. But, as we have already seen, there are other evidences on record which refute the common notion still more conclusively.

True, there may be some doubt as regards the exact age of this Anglo-Saxon manuscript. J. Strutt assigns to it the tenth century. The disagreement between the antiquaries on this question is not great, and wherever such a disagreement exists it is generally safest for the uninitiated bystander to accept the less high age.

The Anglo-Saxon *fithele* alluded to is pear-shaped like the *lyra* in Gerbert's "De Cantu et Musica Sacra;" but it has four strings, while the latter is represented with only a single string. The bridge is not indicated in the Anglo-Saxon illustration; however, this may be owing to carelessness of the artist, since there are some other Anglo-Saxon representations of the *fithele*, of later centuries, in which the bridge is indicated. One of these instruments is three-stringed, and is, in fact, a *rebec*. Another has five strings like the continental mediæval *viol*. Perhaps not much reliance ought to be placed on the number of strings exhibited. The four-stringed *fithele* is depicted with little holes near the top, through which the strings are drawn and fastened to screws at the back of the neck, just as is still the contrivance on the *rebab* and on some other oriental instruments.

In order to facilitate the use of the bow, it was soon found desirable to modify the oval shape of the instrument. Thus originated the incurvations at the sides of the fiddle. The statement of some writers, that the incurvations were adopted for the purpose of enabling the player to hold the fiddle conveniently between his knees, is evidently unfounded. It was not the custom thus to place the instrument, even if its dimensions were rather large. The player held it before his breast, or in his lap, in the oriental fashion, or near to his neck.

Subsequently the fiddle experienced various alterations

in its outward appearance, and also in its name. To follow its history until the present day, all over Western Europe, from Spain to Iceland, does not come within the scope of our present research, and would require much space. However, an enumeration of the most common designations of this instrument, all supposed to have been derived from the Latin *fidicula*, may afford some useful hints. It will be observed that the original name has become especially euphonious with nations in the south of Europe, thus:—

Fidicula, Latin; *fidula*, Old High German; *vitula*, mediæval Latin; *videle*, Middle High German; *fithele*, Anglo-Saxon; *figella*, *fitola*, late mediæval Latin; *viguéla*, *vihuela*, Spanish; *vièle*, *vielle*, *viole*, French; *fidla*, *fiol*, Norwegian; *fiedel*, *violine*, German; *fiddle*, *violin*, English; *viola*, *violetta*, *violino*, *violono*, Italian.

This list might be greatly enlarged, especially if notice were taken of the numerous names which have been coined to indicate certain characteristics of varieties; as, for instance, *viola-da-gamba*, *viola-di-bordone*, *violoncello*, *viola-di-spalla*, &c.

As regards the opinion of some musical writers, according to which the term *viol* is derived from the Latin *phiala* (Italian, *fiala*; French, *phiole*; English, *phial*, also written *vial*), designating a bottle, the opinion has scarcely any foundation to support it, except the circumstance of an oval bottle with a long neck having some resemblance in shape to a fiddle.

The original method of sounding the strings of the viol by twanging them has never entirely fallen into disuse in its supposed offspring. The *fidula* mentioned by Otfried in his "Evangelienharmonie" ("Harmony of the Gospels"), about the year 860, was most likely thus played. The passage in which it is mentioned is as follows:—

> Sih thas ouh al ruarît thaz organa fuarit,
> Lira, ioh fidula, ioh managfaltu suegala.
>
> (There all are active who carry instruments,
> Lyre, fiddle, and different flutes.)

The ancient Germans are supposed to have possessed a sort of fiddle played with a bow (see G. Klemm, "Handbuch," p. 192; A. Weinhold, "Altnordisches Leben," p. 344; H. Weiss, "Kostümkunde," p. 671); but, as the time in which they had it appears uncertain, this opinion is of but little use in our investigation.

According to the preserved illustrations, the German *fiedel* was still in the tenth century usually played with a plectrum. In fact, not earlier than about the twelfth century it appears as an instrument played with the bow. In the latter character it is represented in the "Chronicon picturatum Brunswicense" of the year 1203, which also contains a strange anecdote about a village parson, who was fiddling to his dancing flock during a thunderstorm, and his "*veddel-bogen*" is especially mentioned. Likewise in the "Nibelungenlied," which dates from the thirteenth century, the fiddle-bow is distinctly noticed thus:—

> Volkêr der vil küene zôch nâher ûf der banc
> Einen videlbogen starken, michel unde lanc,
> Gelîch eime scarpfen swerte, vil lieht unde breit,
> Dô sâzen unervorhten die zwêne degene gemeint.

In Spain we find in the beginning of the fourteenth century a *vihuela de penola* (a viol played with a quill or plectrum), and a *vihuela de arco* (a viol played with a bow). The Archipreste de Hita, in his poem of the year 1330, already noticed, alludes to both these instruments. Of the last-named one he says: "La vihuela de arco face dulces bailadas."

The *vihuela de penola* was, according to M. S. Fuertes ("Historia de la Música Española," Vol. i., p. 106, Madrid, 1855), strung with metal strings. E. Vander Straeton ("La Musique aux Pays bas avant le XIX^e^ Siècle," Vol. i., p. 235) quotes an old Spanish document, of the year 1559, concerning a musician of the name of Gaspard Payen, who is described as a *musico de vihuela d'arco*, and is recorded to have accompanied the emperor, Charles V., and afterwards the king, Philip II., in that capacity. From this document it would appear that the *vihuela de penola* was still in use at that time; otherwise it is hardly probable that the *arco*

would have been especially mentioned. The *vihuela* represented on the famous sculpture of the Portico della Gloria of Santiago da Compostella, in Spain, which dates from the year 1188, has no bow. Its form is oval, and it is three-stringed. Perhaps this instrument is the *vihuela de mano* mentioned in ancient Spanish literature, which probably differed from the *vihuela de penola* only inasmuch as it had catgut strings, and was played with the fingers instead of a plectrum. The Spanish peasants still call their rustic guitar *vihuela*. Moreover, the instrument appears to have been known in England in the sixteenth century by the designation of "the Spanish viol." At any rate, in the list of the musical instruments belonging to King Henry VIII., which is preserved in the British Museum, we find "Gitterons, which are called Spanish vialles."

The Portuguese have still, at the present day, a *viola* which is twanged like the guitar; and their descendants in some districts of Brazil actually call the guitar *viola*. Perhaps more noteworthy is the fact that the Malays have a one-stringed fiddle called *biola*. However, this name may have been borrowed from the Portuguese settlers in Malacca, who, although about two hundred years have elapsed since their forefathers came to the Malay Peninsula, still speak a sort of broken Portuguese. Moreover, we have seen before (page 17) that the Hindus call our violin *bahulin*.

Howbeit, we do not need to turn to foreign countries to convince ourselves that the ancient manner of playing the viol has never been entirely dispensed with. Even the strings of our violin are not unfrequently twanged. I need hardly remind the reader of the wonderful effects which Beethoven has produced by the employment of *pizzicato*. His quartet in E flat major, Op. 74, is especially remarkable in this respect; likewise his symphony in C minor, which contains whole passages thus produced by all the violins.

Enough has probably been said to show that the English designation *fiddle* was applied, in the course of centuries, to almost any stringed instrument played with a bow, especially if it belonged to the smaller kind held in the arm or before

the breast when played. Thus the *rebec* was also called a *fiddle;* and the same is still the case with the violin. However, the designation is now used rather contemptuously, and only a poor violinist, or a crowder, is a *fiddler*. Precisely this meaning is also now attached to the German *fiedel*. Both designations are only known as appertaining to instruments played with a bow; if there was, about a thousand years ago, in England a fiddle the strings of which were twanged, it must have resembled the *rebec* rather than the violin.

The ancient meaning of the German word *fiedel*, referring to a musical instrument sounded without the use of a bow, is still retained in *strohfiedel*, which designates a kind of harmonica constructed with sonorous slabs of wood. The slabs are placed on cords of straw, and are beaten with rods. The *strohfiedel* is still occasionally to be found among the rural population in Germany. About a century ago it appears to have been very common in Saxony, to judge from a notice of it by Dr. Burney, in "The Present State of Music in Germany," Vol. ii., p. 71 (London, 1775), who, however, describes it as being made of pieces of glass instead of wood, and who spells its name incorrectly—*strofil*. As was to be expected, the more euphonious glass harmonica had at that time already superseded the ancient wooden *strohfiedel* ("straw-fiddle").

The allusions to the *fiddle* occurring in English literature are not of a very remote age. Chaucer calls it *fidel*, which is nearly the German designation, *fiedel*. The following examples from different English works will suffice to show how vaguely the term was used, musically regarded:—

G. Chaucer ("Prologue," v. 298; fourteenth century):—

> For him was lever han at his beddes hed
> A twenty bokes, clothed in black or red,
> Of Aristotle and his Philosophie,
> Than robes riche, or fidel, or sautrie.

Translation of the Bible (2 Kings vi.; anno 1551): "And Dauid and al the house of Israel played before the Lord with all maner instrumentes of fyrre woode, wyth harpes, psalteries, timberelles, fyddelles, and symbals."

J. Bale ("Image," Part iii.; sixteenth century): "The merye noyse of theym that play vpon harpes, lutes, and fydeles shall not more be hearde in thē to the delyght of men."

J. Jewell ("Defence;" sixteenth century): "Ah syrs, woulde ye haue the common people come to the Generall Councel? Whom meane ye, I praie you? Tinkers and tapsters, fydlers and pypers, such as your ministers be? Alas poore soules, what should they doo there? for there is no tinkinge nor tippling, no fidlinge nor pypinge."

In order to avoid unnecessary repetitions, the reader is here referred to a previous statement respecting the English fiddle on page 40.*

Charles Richardson, in his "Dictionary of the English Language," suggests that the instrument and the name of it are both of Scandinavian origin; and he points to the Gothic and Icelandic word *fidra*, also written *fidla* and *fitla*, as being probably the parent root.

The Icelandic *fidla*, still at the present day occasionally constructed, is a rather large sort of fiddle, resembling in shape the antiquated *rebec*, but being provided with a peculiar contrivance of wooden bridges affixed in a row on the soundboard, and serving the purpose of frets. No doubt the instrument, which has three metal strings, generally of brass wire, was originally twanged with a plectrum, as is the case with the Norwegian *langelegen*, which the Icelandic *fidla* likewise resembles in shape. In fact, the Icelanders possess also a kind of *langelegen*, called by them *langspille*. It is very remarkable that in the most northern countries of Europe musical instruments are to be found which, from their carved ornamentations, as well as from certain peculiarities in their construction, strongly point to Western Asia as their original home. The Islandic *fidla* might easily be mistaken for a large Arabic *rebab*. The instrument is said to be becoming now scarce in Iceland. I have seen only one specimen, which was sent to England, and which had probably been made in the present century.

* I have referred to page 40, believing that to be the statement intended.—A. J. H.

THE VIELLE.

THE mediæval *vielle*, or *viële* has often been mistaken by modern writers for a hurdy-gurdy. J. Strutt, for instance, in his "Sports and Pastimes of the People of England," Book iii., chap. 3, explains it thus: "The jugleours [jongleurs], who, in the middle ages, were famous for playing upon the *vielle*, accompanied the songs of the troubadours. The *vielle* was a stringed instrument sounded by the turning of a wheel within it, resembling that which we frequently see about the streets played by the Savoyards, vulgarly called a hurdy-gurdy." The majority of the English musical publications, including dictionaries, give no better information.

The reader may imagine the picturesque scene of a troubadour singing on a fine moonlight night, before the window of his lady, a touching love-song, and accompanying his voice by grinding a hurdy-gurdy. If anything could have been more ridiculous than this sight, it must have been the music.

However, evidences are not wanting which clearly show that the instrument was not a hurdy-gurdy, but a viol, played with the bow. This might, indeed, be surmised from the manner in which the *vielle* is enumerated with other musical instruments in some of the poems. But the bow is also especially mentioned. The Bibliothèque Nationale, at Paris, contains some songs by Colin Muset, a celebrated minstrel and poet of the thirteenth century, who is supposed to have been in the service of Thibaut, King of Navarre. In one of these songs occur the lines :—

J'alay a li el praelet,
O tot la vielle et l'archet
Si li ai chanté le Muset.

("I went to her in the meadow, and sang to her my song with the vielle and bow.")

In a poem by Thibaut, of the year 1230, which has been already alluded to (see page 84), the *vielle* is called *violle;* and in another poem of the thirteenth century, which is in the Bibliothèque Nationale, at Paris, and of which Fétis has cited some extracts ("Histoire Générale de la Musique," vol. v., p. 23), the instrument is called *viële*, and is mentioned together with the *rote*, *lire*, *harpe*, and *gighe*. In both these instances the viol played with a bow is evidently meant.

How many strings had the *vielle* played with the bow, and what was the order of intervals in which they were tuned?

These questions are more easily asked than answered. There were different kinds of the *vielle*, each having its peculiar *accordatura*. Besides, the arrangement differed probably in the earlier mediæval centuries from that adopted at a later period. The reliable records on this subject which we possess extend no further back than to the thirteenth century. In the treatise by Hieronymus de Moravia, which has been already mentioned (see page 100), three kinds of the *vielle* are described, each kind being mounted with five strings, thus :—

A. W. Ambros ("Geschichte der Musik," Vol. ii., p. 240) and Fétis ("Histoire Générale de la Musique," Vol. v., p. 168) give the intervals obtainable on these three instruments as follow :—

It will be observed from the notation that the first kind of *vielle* had a *bourdon*, or *drone* string, which produced only a single tone. This string did not rest on the bridge, but was placed so as to run at the side of the fingerboard instead of over it. A similar contrivance was formerly adopted, not only on several instruments played with a bow—as, for instance, on the *lira-da-braccio*—but also on the *theorbo*, or double-necked lute. The *bourdon* on the *vielle* was twanged with the thumb of the left hand. Its position and the oval shape of the body of the instrument rendered it impossible for the player to touch this string with the bow.

If I express now the opinion that the above notation, given by Ambros and Fétis, is not quite correct, the reader will probably wonder why it should have been noticed here. My reason for drawing attention to it is simply to assist the musical student who is likely to refer to the works of those authors. The neck of the *vielle* is stated to have been provided with frets. Fétis especially notices the divisions on the fingerboard. But, if the instrument was thus constructed, and the major and minor thirds could be produced on the higher G string, both these intervals must have been also obtainable on the other strings; except on the *bourdon*, which was not on the finger board. However, it may not have been the custom to use other intervals than those indicated in the notation.

The highest string, or two strings tuned in unison, served for playing the melody. The lower strings were sounded simultaneously to produce a drone accompaniment. Thus, if the fundamental tone of the melody was G, the accompanying open strings gave the drones  , and if the fundamental tone, or the tonica, was C, the player had merely to raise the pitch of the drone  by pressing down the open string above the fret, which produced the fourth, and this gave him the accompaniment  . In short the treatment of the instrument caused it closely to resemble the hurdy-gurdy, as regards combination of sounds and drone effect.

About the fifteenth century the name of *vielle* was actually transferred to the hurdy-gurdy. At a first glance this instrument appears not to have the slightest connection with any sort of fiddle, and the adoption of the name *vielle* for the hurdy-gurdy seems inexplicable. It happened, however, quite naturally, as I shall endeavour to show by the following brief sketch of the history of the hurdy-gurdy.

The mechanism of this instrument, sounding the strings by friction caused by the turning of a wheel, is evidently a European invention; at least, no such contrivance is known among the numerous and various oriental instruments which were in use before the time when our oldest known hurdy-gurdy, the *organistrum*, was constructed. A representation of the *organistrum*, supposed to date from the ninth century, is given in the Abbot Gerbert's "De Cantu et Musica Sacra" already noticed. A faithful reproduction of the original illustration is given in the essay on the history of musical instruments which forms the introductory chapter to the descriptive catalogue of the musical instruments in the South Kensington Museum.

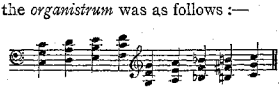
Fig. 29.—Organistrum: Boscherville.

The term *organistrum* is a compound of *organum* and *instrumentum*. The noun *organum* was, in vocal music, applied to the primitive harmonious combinations obtained by a simultaneous sounding of octaves, fifths, or fourths. The same rude attempt at producing harmony is exhibited on the instrument in question: hence its name.

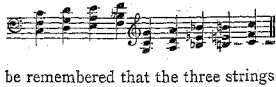
What purpose did the indentations at the sides of the *organistrum* serve? The hurdy-gurdy does not require them; but they are useful on an instrument played with the bow.

It may therefore be surmised that the form of the *organistrum* represents that of a viol previously in use. However, there are no reliable evidences on record of the existence of viols with such indentations as early as the ninth century; therefore the date given to Gerbert's *organistrum* appears to require a rectification: probably it ought to be fixed three centuries later. At all events, the *organistrum* which is represented on the bas-relief from the Abbey of St, George de Boscherville, Normandy, dating from the eleventh century, is nearly identical in appearance with that depicted in Gerbert's work. Likewise, an *organistrum* in the sculpture of the Portico della Gloria of the church of Santiago da Compostella, in Spain, which dates from the twelfth century, exhibits the original shape and construction. This unwieldy instrument required two persons for performing on it, one turning the wheel while the other pressed the keys. Now, however sceptical the reader may feel about the date assigned to Gerbert's *organistrum*, thus much appears certain: the hurdy-gurdy was contrived soon after the fiddle-bow became known; and probably it was suggested by the fiddle-bow. Moreover, there can be no doubt that it retained for some centuries its original form, and its inconveniently large size.

According to our musical *savants*, the order of intervals yielded by the *organistrum* was as follows:—



And also with fifths for the upper strings, thus:—



It must be remembered that the three strings with which the *organistrum* was mounted rested on a bridge, and were sounded simultaneously on the wheel being turned. Eight frets, or bridges, placed on the neck of the instrument, could be raised and lowered by means of keys, or, rather, handles,

situated at the side of the neck. Thus the succession of fifths and octaves exhibited in the above notations was obtained. Possibly, by means of some contrivance, one or two of the strings could be silenced at the option of the player; but there are no indications in the illustrations suggestive of such a contrivance, and the conjecture is merely supported by the simple fact that at the present day the hurdy-gurdy is provided with a contrivance which enables the performer to silence certain drone-strings at pleasure. Whatever may be thought of its musical charms, no doubt the instrument had its admirers during the middle ages. Even at the present day many musicians are not so averse to consecutive fifths as theorists tell them they ought to be.

Fig. 30.—Organistrum: Santiago da Compostella.

As the *organistrum* in the sculpture of Santiago da Compostella, in Spain, before adverted to, has hitherto not received by musical historians the attention which, in my opinion, it deserves, some account of it, accompanied by an illustration, will, it is hoped, prove acceptable to the reader. The two players on the instrument form part of a group of twenty-four musicians, representing the twenty-four Elders seen by St. John in the Apocalypse. The figures are life size, and are seated so as to form a semi-circular group. Most of them have a viol (Spanish, *vihuela*) played without a bow. The *organistrum* is placed in the centre of the group. The circumstance of a rather prominent place being given to it also in the sculpture from Boscherville suggests that

it was used in sacred music rather as a church-organ. No doubt smaller specimens of the same construction were used in secular musical performances, and we should probably also possess illustrations of them had not the sculptures on sacred edifices a better chance of being preserved than others. The non-occurrence of the bow with the *vihuela* is explicable from the description which has been given of the instrument (see page 122).

Probably the *organistrum* was originally known by different names in different European countries. Only its early mediæval Latin name has been transmitted to us. During the thirteenth century it was called *symphonia* (frequently corrupted into *cyfonie* and *chifonie*), and the instrument was made of smaller dimensions than hitherto, in order to render it more manageable and suitable for a single performer to turn the wheel with one hand and to touch the keys with the other hand. The name *symphonia* was probably given to it because the rude harmonious combinations produced by the simultaneous sounds of different strings, and the bass-tones of the drone-strings, were especially appreciated as constituting the chief characteristics of the instrument. In some countries the bagpipe was also called *symphonia*, evidently on account of its drones and its primitive harmony.

The fiddle-bow was, in the thirteenth century, still an implement so rudely made, that many lovers of music preferred the friction produced by the wheel, especially as the keys attached to the fingerboard, or, rather, to the neck of the instrument, enabled the player to obtain the tones in the proper pitch, without great exertion or particular skill. No wonder that most of those instruments the strings of which were originally twanged, and to which the bow was later applied, were also constructed with a wheel. We have seen that the fiddle was called in mediæval Latin *lyra*. Hence subsequently the names of *lyra mendicorum*, *lyra pagana;* the Italian *lira rustica*, *lira tedesca*, *viola-da-arbo*, *ghirondo ribeca;* the German, *Leyer*, *Bauernleyer*, *Bettlerleyer*, *Deutsche-Leyer*, &c.—all designating the hurdy-gurdy. As regards its English name, I must leave the explanation of its original meaning to English musicians, who are likely to

understand their mother-tongue better than a foreigner. Edward Jones, in his "Musical and Poetical Relicks of the Welsh Bards," p. 91 (London, 1794), spells it *hordy-gourdy;* perhaps this may give them a clue.

J. O. Halliwell, in his "Dictionary of Archaic and Provincial Words," states that the country people in the north of England call the loins *hurdies;* and the "Slang Dictionary," compiled by J. C. Hotten (London, 1864), contains the suggestion that the name of the musical instrument may have been derived from the circumstance of the hurdy-gurdy being usually *girded* on the *hurdies*, loins or buttocks. If this is the right derivation, the instrument may be supposed to have become first known in England from the northern districts of the country, if not from Scotland.

When, in the fifteenth century, the French adopted the wheel to the *vielle*, and it became a hurdy-gurdy, they also retained their *vielle* played with the bow; and, by way of distinction, they called the latter instrument *viole*. The shape of these two instruments was originally the same. Subsequently, in the eighteenth century, they gave to the *vielle*, or hurdy-gurdy, occasionally the shape of the lute or of the guitar; and they called the instrument, according to its outward appearance, *vielle en luth*, or *vielle en guitare*. By adopting different forms, they obtained different qualities of sound. The *vielle en luth* had a fuller tone than the *vielle en guitare;* but the latter was regarded as a more impressive and charming instrument.

The present woodcut exhibits the hurdy-gurdy as its shape still was during the sixteenth century, and even later. The reader will perceive at once that it was the mediæval viol, with the difference of a wheel and handle for the original bow. The illustration is copied from the little book by Lucinius already adverted to.

About the year 1720, Charles Bâton, a manufacturer of hurdy-gurdies in Versailles, actually used old guitars for the construction of his *vielle*, and he is said to have succeeded remarkably well with these alterations. About that time there lived still in Paris some distinguished players on the hurdy-gurdy, who occasionally performed in public concerts,

and whose compositions for the instrument have been published.

Moreover, various other mechanical contrivances for superseding the use of the bow have been adopted with more or less success. The famous *geigenwerk*, or *gambenwerk*, constructed by Hans Heyden, in Nürnberg, about the year 1600, contained half a dozen small wheels made of steel, smoothly covered with parchment and rubbed with resin, and it was provided with a keyboard resembling that of the clavichord. The *bogenclavier*, invented by Johann Hohlfeld, in Berlin, in the year 1751, was likewise provided with a keyboard, and had catgut strings, which were vibrated by a bow of horsehair put in motion by means of a wheel which the player turned by touching with his foot a pedal. In the year 1794, C. A. Meyer, in Görlitz, constructed an instrument called *bogenflügel*, which was provided with a separate bow for each string. The so-called *celestina*, patented by Adam Walker, in London, in the year 1772, had a running band instead of a bow; and the same was the case with the *sostenente-pianoforte*, patented by J. H. R. Mott, London, 1817. The *tetrachordion*, or *pianoforte-quatuor*, patented by H. C. Baudet, in Paris, about the middle of the present century, contains little wheels coated with resin. In fact, there are on record various modifications of the same expedient which were patented as "new inventions." However, the astounding accomplishments of modern musicians with the bow have had the effect of placing all these mechanical contrivances in the background as unsuccessful and objectionable experiments.

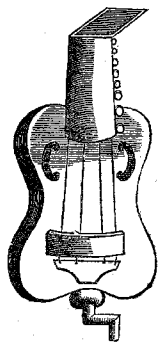


Fig. 31.—Lyra mendicorum.

If I have been more circumstantial in tracing the history of the hurdy-gurdy than some readers may care for, the

research appeared to me advisable on account of the close relationship between the hurdy-gurdy and the fiddle. Both are stringed instruments of friction, and children of one parent; besides, the *vielle* affords an additional curious example to those previously noticed of the misapprehension which has arisen from the circumstance of the designation of a certain musical instrument having been transferred, in the course of time, to another musical instrument, apparently of a different class.

In connection with the above sketch of the history of the hurdy-gurdy, I purpose now to give a short account of a curious stringed instrument, called *nyckelharpa*, which is played with a bow, but which in other respects is almost identical with the hurdy-gurdy; it is still occasionally to be found among the peasantry in Sweden. There can hardly be a doubt that its origin dates from the later middle ages. I am all the more induced to draw attention to this instrument since it is not mentioned in any of our treatises on the history of the violin. It is, of course, very difficult to convey by a mere description an exact impression of the appearance and peculiar construction of a musical instrument so extraordinary as is the *nyckelharpa*. An illustration of the front and back aspect of a specimen is therefore here inserted.

Still, I would advise the reader, if he has the opportunity, to examine this instrument, which is exhibited in the South Kensington Museum. The following account of it may interest other musical archæologists.

The *nyckelharpa* is made of pine-wood. It measures nearly three feet in length, has two oval soundholes near the lower end of the belly, and is mounted with four catgut strings and eight sympathetic strings of thin steel and brass wire. The reader need, perhaps, hardly be reminded that the sympathetic strings merely serve to increase the sonorousness of the strings which are sounded by the player. They are for this purpose placed beneath the catgut strings, close to the soundboard, and the player cannot touch them with the bow; however, they slightly vibrate sympathetically when the catgut strings above them are vibrated.

At the right side of the upper end of the *nyckelharpa* are nineteen tangents, or keys, which, when pressed in, alter the pitch of the first or thinnest catgut string, in the same way as do the keys of the hurdy-gurdy. On three places the keys alter also the pitch of the second catgut string. The third

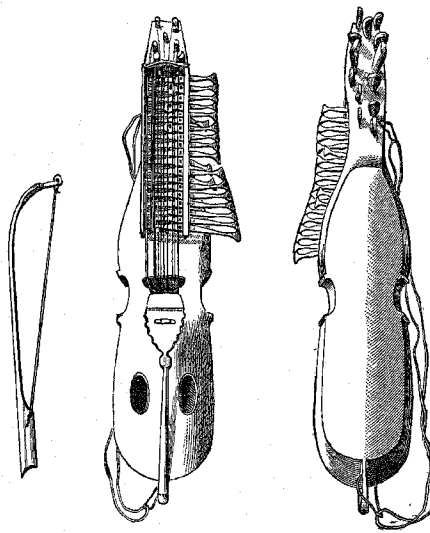


Fig. 32. Nyckelharpa : Sweden.

and fourth catgut strings are drones. The keys, if pressed in a regular succession, produce the chromatic scale. The *nyckelharpa* is provided with a soundpost inside under the bridge. The rude bow belonging to the instrument is strung with black horsehair, is much bent at the upper extremity,

and measures nineteen inches in length. The keys, o tangents, are very long, and somewhat resemble those of th mediæval *organistrum*. The intervals of the fourth anc seventh can be produced only with some difficulty; th arrangement of the keys therefore partakes of a pentatonic character. Most likely the *nyckelharpa* was originally playec with the fingers, or with a plectrum. Its name (from the Swedish *nyckel*, "key," and *harpa*, "harp") suggests this. We have seen that the expression "to harp" was formerly used for "to pull" or "to twang." The *nyckelharpa* has certainly not the slightest resemblance with a "keyed harp;" but, as has been already intimated, it resembles the hurdy-gurdy. Its drone-strings are tuned in the interval of a fifth. The player sounds them continuously while executing the melody on the highest string acted upon by keys.

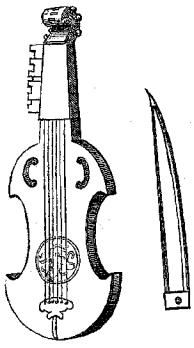


Fig. 33.—Schlüsselfiedel: Germany.

However, there are varieties of the *nyckelharpa*. The construction of the older specimens was somewhat more simple than that of specimens dating from the eighteenth century. I am in possession of a photograph of a *nyckelharpa* which was found in Upland, a central district of Sweden, and which exhibits a greater number of keys than the specimen which I have described. Musical antiquaries who take an interest in the early history of the violin ought not to neglect to make themselves acquainted with the very characteristic and suggestive construction of the *nyckelharpa*.

The only intimation of a somewhat similar contrivance having formerly been known in Germany is given by Agricola and Prætorius. These authors notice a sort of fiddle, called in German *schlüsselfiedel*, which was provided with keys instead of frets. According to the illustrations transmitted

to us, it had no bridge on the soundboard. The form of the *schlüsselfiedel* is almost identical with that of the *grosse-geige* already noticed (page 103). The keys attached to the side of the neck resemble those of the hurdy-gurdy.

The non-existence of the bridge on the *schlüsselfiedel* rather suggests that the omission of the bridge* in the illustrations of the *grosse-geige* dating from the sixteenth and seventeenth centuries is not, as most of our musical historians suppose, owing to an oversight, but that it constituted a characteristic peculiarity of the instrument. However, I cannot express myself decidedly on this question, since we meet occasionally with an example showing that our old musical authors were by no means so infallible as some modern writers are disposed to regard them.

As has already been intimated, the *grosse-geige* was a viol popular in Germany during the fifteenth and sixteenth centuries. Referring to Hawkins's "History of Music," which is easily accessible, the reader will find in Vol. ii., Book iv., chap. 4, an illustration of this instrument, together with an illustration of the German hurdy-gurdy. The two figures, which are copied from Luscinius, must convince every unbiassed inquirer that in Germany also the hurdy-gurdy was originally a modified viol, constructed with the object of superseding the troublesome management of the bow. Both instruments are depicted almost exactly alike in outward appearance, the only difference being the addition of the wheel and handle on one of them. These illustrations may be relied upon, since they accord with other evidences.

On the other hand, the representation of the *clavicitherium*, copied by Hawkins from Luscinius, and given by him on the same page which contains the hurdy-gurdy, is evidently incorrect. The *clavicitherium*, which was an upright spinet, is represented by Luscinius and Hawkins as having the longer strings at the right-hand side and the shorter strings at the left-hand side. The bass must consequently have been where the treble is on the pianoforte, and the treble must have been where the bass is. Surely a slight considera-

* *See* footnote to page 103. The attachments of the strings is shown on the bridge of the Schlüsselfiedel (*see* drawing, page 136): the bearing is inferred.—A. J. H.

tion might convince any musician that this is a misrepresentation owing to the circumstance of the engraver of the woodcut having neglected to reverse the design. Nevertheless, the old illustration has been reproduced by most of our writers on the history of the pianoforte and its precursors without a suspicion of its incorrectness or an intimation of its exhibiting an unusual construction. Rimbault, in his book on the pianoforte, has, however, reversed it without commenting upon it. Fétis, in his "Histoire Générale de la Musique," Vol. v., p. 204, has noticed it, and has made it the theme of a discussion on the music of the ancient Greeks, Romans, Arabs, and Persians, in order to show that on the *clavicitherium* the bass may possibly have been on the right-hand side of the fingerboard. A reference to a musical notation for the instrument, written by Martinus Agricola, in the beginning of the sixteenth century, at last compels the learned Fétis to conclude that there must be some incorrectness in the design. If it had occurred to him to hold the leaf of his musical history, which contains the wrong illustration, before a candle, and to look at it from the opposite side, he would have seen the puzzle solved without reference to the Greeks, Romans, Arabs, and Persians.

Oversights like the present are noteworthy to the student, especially in investigations on antiquated musical instruments. If they had not often been promulgated by musical compilers, much confusion would have been prevented.

As regards the application of keys to the fingerboard of instruments of the violin family, there is no probability that a revival of this obsolete expedient could in any way be of practical use, except perhaps on the double-bass. In the year 1850, J. B. Vuillaume, in Paris, constructed a large and powerful double-bass, the neck of which is provided with frets, and with keys which the player presses upon the strings with his left hand. This instrument, which is called *octobasse*, therefore exhibits much the same construction which characterised the antiquated *schlüsselfiedel* of the Germans, and which is still preserved in the curious and scarce *nyckelharpa* of the Swedish peasants.

THE VIOL.

ALTHOUGH the English viol belongs rather to the post-mediæval instruments, it must not be left unnoticed here, since it originated in the middle ages. Besides, the viols constitute, so to say, the link between the early instruments played with a bow and our present ones; and the previous investigation may be rendered more useful by being extended to the time of the invention of the violin. The task is easily accomplished. In the beginning of the sixteenth century, some musical treatises were published which contain illustrations and descriptions of the musical instruments in use at that time; and subsequently there are no considerable difficulties in tracing the history of the immediate precursors of the violin. However, it is not my object to recapitulate statements which may be supposed to be known to the reader of the present essay, since they are to be found in most of our treatises on the history of the violin. I purpose rather to draw attention to some noteworthy facts which, in my opinion, have not received the regard which they deserve.

We have seen (page 122) that the "Spanish *vialles*," mentioned in the inventory of the musical instruments which belonged to King Henry VIII. were not played with a bow; and perhaps the translators of the Bible, in the beginning of the seventeenth century, did not mean any sort of fiddle by rendering the Hebrew *nebel* in English "viol"—thus, Amos v. 23: "Take thou away from me the noise of thy songs; for I will not hear the melody of thy viols." And, again, Amos vi. 5: "That chant to the sound of the viol, and invent to themselves

instruments of musick, like David." See also Isaiah v. 12, and xiv. 11.

Neither does it appear certain that the following passages by English writers refer to an instrument played with a bow:—

Richard Hakluyt ("Voyages," Vol. iii., p. 571; anno 1598): "They were exceedingly delighted with the sound of the trumpet and vialles."

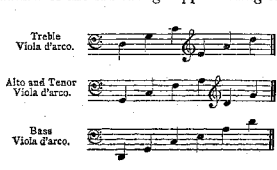
Michael Drayton ("Poly-Olbion"; anno 1613):—

> The trembling lute some touch,
> Some strain the viol best,
> In sets which there were seen,
> The music wond'rous choice.

Thomas Fuller ("Worthies of England"; anno 1662): "Besides his fancies of the three, four, five, and six parts to vyol and organ, he made above thirty severall sorts of musick for voyces and instruments."

Certain German and Italian musical publications of the sixteenth century describe several varieties of the viol which were in popular use. Indeed, we have already found different kinds at an earlier period, in examining the French *vielle* and the German *grosse-geige*, which date from the middle ages.

In an Italian instruction-book for the viol by Silvestro Ganassi del Fontego, published in Venice in the year 1543, and entitled "Regola Rubertina che insegna suonare de Viola d'arco tastada," the instrument is described as containing seven frets on the fingerboard, and as being manufactured of three different sizes, with the following *accordatura* of the six strings appertaining to each size:—



Each of these three viols had a compass of two octaves and a half, which permitted the execution of the chromatic order of intervals.

The tuning resembles that of the lute. The same is the case with the tuning of a large German viol given by Hans Judenkünig, in his instruction-book for the *lute* and *geige* (Vienna, 1523). The illustration of the titlepage of Judenkünig's work represents a player on a six-stringed viol which he holds before his breast. He is standing, and the instrument reaches from his shoulders to his knees. The head of this viol is placed at right angles with the neck, as was the case with the upper termination of the lute. The *accordatura* is given by Judenkünig in the following intervals:—

I have had no opportunity of seeing the scarce treatise by Judenkünig, a copy of which is in the Imperial Library at Vienna. The present illustration is taken from Abele's "Die Violine;" but there is no reason to doubt its faithfulness, especially as the figure is rather imperfectly drawn, just as we find is often the case in publications of this kind dating from the sixteenth century.

The instrument resembles the *grosse-geige*, and the titlepage of Judenkünig's work indicates that the name *geige* was, about the year 1500, already usually applied by the Germans to almost every kind of fiddle.

The *viola-da-gamba*, which, during the seventeenth and eighteenth centuries, was very popular also in England, is an improved Italian *viola d'arco tastada* of the largest kind. The name *viola-da-gamba* occurs in German musical literature not earlier than in the beginning of the seventeenth century. Michael Prætorius, in 1619, mentions it, and describes it as being mounted with six strings, and being held between the knees by the player.

The English name for the *viola-da-gamba* was *bass-viol* (or, rather, *base-viol*, according to the antiquated spelling); but the instrument was also often called *viol-de-gambo;* at any

rate, this corruption from the Italian occurs not unfrequently in English literature. Christopher Simpson, in his instruction-book, entitled "The Division-Violist, or an Introduction to the Playing upon a Ground" (London, 1659), describes three different kinds of the *bass-viol*—viz., the *division-viol*, the *consort-basse*, and the *lyra-viol*. The first-named, used especially for solo performances, was somewhat smaller in dimensions than the *consort-basse;* and the *lyra-viol* was the smallest of the three. Moreover, the *lyra-viol* was mounted with extraordinarily thin strings, and was played from tablature, like the *lute*, instead of from notation.

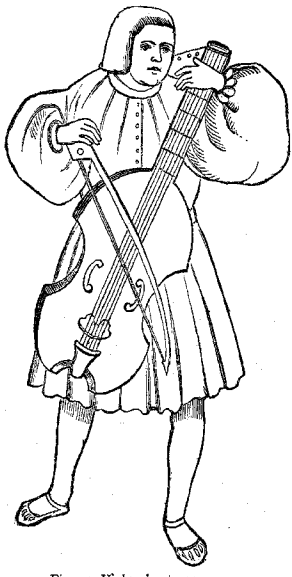


Fig. 34. Viol; about anno 1500.

John Playford, in his work entitled "A Brief Introduction to the Art of Descant" (London, 1683), describes the *treble-viol*, the *tenor-viol*, and the *bass-viol*, with the following *accordatura* for each:—

J. Playford likewise mentions the three different kinds of the *bass-viol*, or "*viol-de-gambo*," which have already been noticed.

It would be erroneous to suppose that because the flatness of the bridge and of the fingerboard, and the employment of frets, were especially calculated for the production of chords and harmonious combinations, the melody was generally simple and easily executable. Simpson and Playford give in their works a list of "graces" which the performers were in the habit of introducing into the melody. Some of the names of these embellishments are not less quaint than the effect of their notations. At any rate, the terms "springer," "elevation," "double-relish," "back-fall," "shaked beat," "close shake," &c., certainly appear in accordance with the funny embellishments which they designate.

The shape of the *viola-da-gamba* was usually made slanting towards the neck. Indeed, most of the immediate precursors of the violin had this peculiar form of the body. It occurs also occasionally on the viol of the middle ages; but, in surveying the numerous illustrations of mediæval instruments which have been copied from paintings and sculptures, we find among those played with a bow many which have a semi-circular upper extremity of the body, not unlike that of the violin.

The *viola-da-gamba* was also occasionally made in this form. The "Division-Violist," by Christopher Simpson (London, 1659), contains an illustration of such a viol. It is represented with six strings like the ordinary bass-viol. Its back was probably flat, and therefore different from the back of the violin or the violoncello.

Another noticeable peculiarity of the viols immediately preceding the violin is the shortness of their fingerboard. Instead of nearly approaching the centre of the body, the fingerboard extends only over a small portion of it. If

reliance can be placed on the accuracy of the mediæval delineations, the earlier viols had seldom a fingerboard which was longer than the neck; and most frequently there was no special fingerboard on the neck.

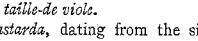
Although the *viola-da-gamba* was generally constructed as a six-stringed instrument, seven-stringed specimens obtained a certain popularity about the year 1700, when the *virtuoso* Marin Marais made use of the seven-stringed *viola-da-gamba*, and published compositions for it. Also the "Pièces pour la basse de viole avec la basse continue," by Caix de Hervelois, which appeared in Amsterdam, about the year 1700, are composed for the seven-stringed *viola-da-gamba*. The additional string was the lowest, and was covered with wire. As it was tuned in

the compass of sound extended a minor third below that of the violoncello.

Again, four-stringed bass-viols were occasionally made in England during the seventeenth century. I have in my possession a specimen which bears the inscription "John Baker, Oxon., 1688." Six-stringed *viola-da-gambas* have often been altered into four-stringed violoncellos for the use of children; but the present instrument is a genuine four-stringed specimen which has not been tampered with.

It is unnecessary for the present object to examine the various French viols which remained in use for a considerable time even after the violin had become popular. Suffice it to mention the names, *dessus-de-viole Par-dessus, haut-contre-de-viole, quinton, taille-de viole*.

The *viola bastarda*, dating from the sixteenth century, resembled the *viola-da-gamba*, but its shape was narrower and somewhat longer, and its six strings were tuned thus:—



The *viola-di-bordone* (or *viola-di-bardone*, as it is more usually called) likewise resembled the *viola-da-gamba;* but it con-

tained beneath the catgut strings a number of thin wire strings, which served partly for being twanged, and partly for increasing the sonorousness by vibrating softly when the catgut strings were sounded with the bow.

Furthermore, mention must be made of the *lira-da-braccio* and the *lira-da-gamba*, two Italian instruments played with a bow, which had two strings running at the side of the fingerboard, in addition to those which were placed over the fingerboard. In England, Francis North, Lord Keeper of the Great Seal, born in 1637, was a distinguished player on the *lira-da-braccio*.

No doubt the reader is acquainted with the *viola d'amore*, which has sympathetic strings; and with a kind of viol strung with wire instead of catgut, which during the eighteenth century was called in England, rather inappropriately, *psaltery*, and which is now known as the *cither-viol*. There are specimens of these varieties of the viol in the South Kensington Museum. A reference to the published catalogue, which contains numerous illustrations, will enable the student to ascertain precisely the form and the distinctive characteristics of these various members of the viol family, even if he should not have the opportunity to examine the instruments in the museum.

The *tromba marina*, or "marine trumpet," requires special notice here, not only on account of its peculiar construction and treatment, but also because it appears to have originated in the middle ages. True, we do not possess any record of its existence before the post-mediæval centuries; however, if it was suggested by the monochord, as is generally asserted by our learned musical historians, there can hardly be a doubt that its origin dates from the later mediæval period. Johann Gottfried Walther, in his "Musikalisches Lexicon" (Leipzig, 1732), describes a two-stringed instrument of the middle ages, called *dichordon*, or *dichordium*, which was played with a bow, and which, if his statement can be relied upon, must have resembled the *tromba marina* The latter instrument, he says, is called *monochordum* or *monochordium*.

The confusion respecting the *tromba marina*, which we

meet with in some modern publications, is undoubtedly owing to the circumstance that there were, some centuries ago, two different instruments known by this name, one being a wind instrument and the other a stringed instrument.

Bonanni, in his "Descrizione degl' Istromenti Armonici," Rome, 1776 (the second edition of his "Gabinetto Armonico," published in the year 1723), gives (plate 99) an illustration of a wind instrument called *tromba marina*, which is evidently a sort of signalling trumpet, and the name of which may have misled some inquirers to the conjecture that the stringed instrument in question was chiefly used by sailors. Considering that it was used by the nuns, there is greater reason to suppose that *tromba marina* is a corruption of *tromba mariana*, implying a trumpet played in honour of the Virgin Mary.

Bonanni's statement that the instrument was a kind of speaking-trumpet is not in accordance with the illustration given by him. The upper end of the tube is represented as very narrow, and the player holds it between his lips. The speaking-trumpet requires a large aperture which entirely covers the mouth, and in which the lips can be moved freely, so as to insure a distinct enunciation.

The earliest German illustration which we possess of the stringed instrument called *tromba marina* occurs in Sebastian Virdung's "Musica getutscht und ausgezogen" (Basel, 1511). Its old German name is *trumbscheit*—*i.e.*, "wooden trumpet." The name *trompanischiza*, by which it was formerly also known, especially in Germany, perhaps indicates that it was regarded as of Slavonic origin. However this may be, there are no indications of its ever having been an especial favourite with sailors. On the other hand, we find it recorded that, some centuries ago, the *tromba marina* was played by the nuns, instead of the real trumpet, during musical performances in the cloisters. Trumpeters were not permitted to visit the nunneries; the nuns had therefore to use this instrument as the best substitute for a trumpet which could be devised.

The *tromba marina* was about seven feet long, and was generally made of only three boards, tapered towards the

head. Its single string was of catgut, and thick. The performer did not press it down, but touched it slightly with the finger, to produce the harmonics, or the trumpet tones.

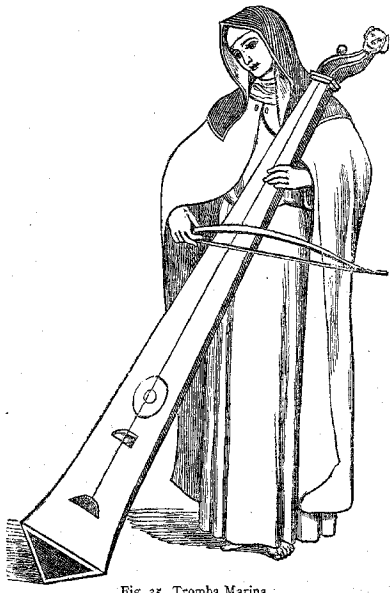


Fig. 35. Tromba Marina.

Occasionally the instrument was mounted with two or even more strings of different lengths; but the thickest and longest string only was touched with the finger so as to yield the harmonics, while the other strings served merely as sym-

pathetic strings. For this purpose, the latter were tuned in the octave or duodecime of the longest. Owing to the peculiar construction of the bridge a trembling sound was produced, since the unfixed position of one foot of the bridge caused the bridge to shake when the string was being sounded. A peculiar quality of tone, somewhat resembling that of the trumpet, was thus obtained.

A *tromba marina* which was in my possession, and which probably dates from the seventeenth century, has, in addition to the thick catgut string, forty-one sympathetic strings of thin steel wire, which are placed in the inside. This interesting instrument is now exhibited in the South Kensington Museum.

The Poles, especially the country people in the vicinity of Cracow, are said to have a small sort of double-bass which they call *marina*. Perhaps an inquiry into the nature of the musical performances in which this instrument was formerly especially used might reveal the original meaning of *tromba marina*.

The designation of *violino* ("small viol") dates from the sixteenth century, when the slanting shape of the higher portion of the viol, and the frets on the fingerboard were gradually discarded on this diminutive variety. According to some writers Testator in Milan, generally called Testator il Vecchio, who lived towards the end of the fifteenth century, was the first maker who reduced the size of the viol and gave it the form of the violin. Howbeit, in the sixteenth century it obtained precisely the shape which has since been retained. The earliest musical treatise in which the designation *violino* occurs is supposed to be "Scintille di Musica," by Giovanni Maria Lanfranco, published in Brescia in the year 1533. The earliest Italian violins of which any reliable information has been transmitted to us date from about the middle of the sixteenth century.

The first violins were made in Italy; but the earliest makers of the instrument appear to have been Germans residing in Italy. At all events, the names Kerlino (Brescia, about 1450) and Duiffoprugcar (Bologna, 1510) suggest that these manufacturers belonged to the distinguished families

of lute and viol makers—Gerle, in Nürnberg, and Tieffenbrucker, in the Tyrol—and that their Italian names, which are spelt in various ways, are corruptions of those German names. Moreover, as regards Kerlino, it appears doubtful whether he really manufactured a violin. Laborde thinks that Kerlino was a native of Brittany. As the name is not French, he conjectures that it must be Breton, just as the Egyptians suppose every European to be a Frank. As early as in the beginning of the fifteenth century, there settled in Italy some accomplished German lute-players, who were undoubtedly also viol-makers, since it was the custom to combine the two occupations. Laux Maler, residing in Bologna, about the year 1415, is still known as the most distinguished lute-maker who ever lived. No doubt he made also viols, though not violins.

The following citations testify to the existence of the violin in England during the sixteenth century:—

Edmund Spenser ("Shepherd's Calendar," anno 1579):—

> I see Calliope speed her to the place,
> Where my goddesse shines:
> And after her the other muses trace
> With their violines.

Ben Jonson ("St. Bartholomew Fair," about 1600): "A set of these violins I would buy too, for a delicate young noise I have in the country; they are every one a size less than another, just like your fiddles."

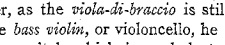
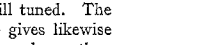
Vyolons—i.e., violins—were introduced into the royal band of Queen Elizabeth during the second half of the sixteenth century; and in King Charles I.'s band, during the first half of the seventeenth century, violins were used together with viols, lutes, and other stringed instruments, in combination with recorders, hautboys, sackbuts, and other wind instruments.

John Evelyn, in his "Diary" (London, 1662), records: "December 21st. One of his Majesty's chaplains preached; after which, instead of the ancient, grave, and solemn wind music accompanying the organ, was introduced a concert of twenty-four violins between every pause, after the French

fantastical light way, better suited to a tavern or playhouse than a church."

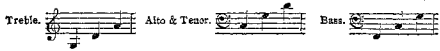
Christopher Simpson ("The Division-Violist," London, 1659) mentions the "quick and sprightly sound of the violin;" and Thomas Mace ("Musick's Monument," p. 246, London, 1676) recommends the use of the violin "on any extraordinary jolly and jocund consort-occasion." John Playford ("A Brief Introduction to the Art of Descant," p. 103, London, 1683) calls it "a cheerful and spritely instrument, much practised of late, some by book and some without." English musical authors of the seventeenth century call the ordinary violin the *treble violin*, and the violoncello the *bass violin*. They recommend the employment of frets for beginners in practising the violin. Thus, John Playford teaches: "For the more plain and easie understanding thereof, and stopping all notes in their right places and tune, it will be necessary that on the neck or fingerboard of your violin there be placed six frets, as is on the viol. This, though it be not usual, yet it is the best and easiest way for a beginner who has a bad ear; for by those frets he has a certain rule to direct and guide him to stop all the notes in exact tune, whereas those that learn without seldom have at first so good an ear to stop all notes in perfect tune."

J. Playford gives the *accordatura* of the *treble violin* in fifths, as the violin is still tuned; and that of the *tenor violin* five tones lower, as the *viola-di-braccio* is still tuned. The notation for the *bass violin*, or violoncello, he gives likewise in fifths, but in a pitch which is a whole tone lower than the usual one, the highest string being, according to his notation, tuned in—

 instead of 

The *accordatura* in fifths, which is now the prevailing one on our stringed instruments played with a bow (excepting the double-bass), appears to have been first adopted on a three-stringed viol mentioned in some German musical works published in the beginning of the sixteenth century.

The instrument resembled in shape and construction the *grosse-geige*, and it was made of three different sizes, which had respectively the following intervals for the open strings :—



To discuss further the history of the violin is unnecessary, as we are arrived here on well-trodden ground. Tempting as it may be to expatiate on the accomplishments of Amati, Guarnerius, Stradiuarius, and other eminent makers of the violin, to whom musicians look up with admiration, my remarks would probably contain but little which would be new to readers interested in the present investigation. Most of our treatises on the violin contain well-ascertained biographical notices of the famous violin-makers who, during the sixteenth and seventeenth centuries, brought the instrument to the highest degree of perfection which it has ever attained, and which is not likely to be surpassed, unless the violin could be altered into an instrument which, retaining all its former excellent qualities, combined with them the compass of the pianoforte and the capability of producing harmony as well as melody in every imaginable combination.

RETROSPECT.

In order to render this essay more useful, I shall conclude it with a brief recapitulation of the facts which I believe to be irrefutable. I feel all the more induced to add this condensed retrospect, since several of my propositions are entirely different from those which have been advanced by previous writers on the history of our instruments played with a bow. Having carefully stated the reasons for my opinions, I must leave it to the judgment of the unbiassed reader to pronounce the verdict, "proven" or "not proven."

1. Almost all European musical instruments have their prototypes in Asia; and many of them had formerly names which indicate their oriental origin.

2. The fiddle-bow was introduced into Europe by the Arabs in the beginning of the eighth century.

3. The earliest European instrument played with a bow was made after the model of the *rebab* of the Arabs, and it obtained the names *rebec*, *rebel*, *ribible*, &c. Subsequently, the European nations applied the bow to several of their instruments, the strings of which they previously twanged.

4. The strings of the Roman *fidicula* were struck or twanged; and the same was originally the case with all the early members of the violin family.

5. The lyre with a convex back, called by the ancient Greeks *chelys*, and by the Romans *testudo*, was known in Central, Western, and Northern Europe, where it was called *chrotta*, *cruth*, *hrotte*, *rotte*, &c. [Before the eighth century its strings were twanged, afterwards the bow was occasionally applied to it.

6. The Welsh *crwth* preserved longest the shape of the ancient lyre. Its strings were originally twanged, and the bow was adapted to the *crwth* at a later period than to the Anglo-Saxon *fithele*.

7. When it became the custom to use the bow with certain instruments, the strings of which were previously twanged, the shape of the instruments was gradually altered, so as to render them more suitable for the application of the bow.

8. The old method of twanging the strings of these instruments did not become obsolete; and, as the specimens which were thus played did not require any alteration of the shape, the same instrument was constructed in two or even more different shapes, according to its intended treatment.

9. As the bow was used especially with the kind of lyre which, according to mythological tradition, was originally made of a tortoise-shell (Greek, *chelys*; Latin, *testudo;* Old High German, *chrota;* Middle High German, *krotte*), and as this lyre was regarded as the principal and oldest kind of *lyra*, the name *lyra* was applied, in the course of time, to any stringed instrument played with a bow; while the name *cithara* was retained for instruments the strings of which were twanged.

10. Towards the end of the twelfth century, a modified rebec came into use in Central and North-western Europe, which was called *gige* (*gigue*, *giga*, &c.), and from which the word *geige*, one of the present German designations for the violin, has been derived.

11. The construction of the hurdy-gurdy was suggested, about a thousand years ago, by the use of the fiddle-bow. The hurdy-gurdy was invented for the purpose of enabling the player to produce the friction of the strings, the correct intonation of the scale, and certain harmonious combinations, mechanically, and with greater facility and certainty than could possibly be achieved by means of the bow. In fact, the bow was still so rude and unmanageable a contrivance that the hurdy-gurdy appeared an improvement upon the fiddle.

12. Our present instruments played with a bow attained

their highest degree of perfection about the year 1700. They have remained unaltered in construction and outward appearance during a period of nearly four hundred years; while all our other musical instruments have constantly experienced improvements.

INDEX.

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