

JAPAN. No. 4 (1871).

REPORTS

ON THE

MANUFACTURE OF PAPER

IN

JAPAN.

Presented to both Houses of Parliament by Command of Her Majesty.
1871.

LONDON:

PRINTED BY HARRISON AND SONS.

[C.—400.] Price 2s. 10d.

Reports on the Manufacture of Paper in Japan.

[N.B.—The samples referred to have been sent to the South Kensington Museum.]

Sir H. Parkes to Earl Granville.—(Received May 13.)

My Lord,

Yedo, March 25, 1871.

LORD CLARENDON, in his despatch of May 13, 1869, directed my attention to the subject of paper manufacture in Japan as one on which information was desired by Her Majesty's Government, and I accordingly issued the inclosed Circular to Her Majesty's Consuls, requesting them to furnish Reports on this branch of native industry.

I have now to forward to your Lordship three Reports which I have received in answer to this instruction, namely, one from Mr. Lowder when acting as Consul at Kanagawa, one from Mr. Annesley, Her Majesty's Acting Consul at Nagasaki, and a third from Mr. Enslie, Acting Vice-Consul at Osaka. Acting upon the suggestion of Mr. Lowder, who, when he wrote his despatch (Inclosure 2), was on the point of leaving for England, I undertook the collection of the specimens obtainable at Yedo, and the inclosed list describes in detail all those I have procured.

I have now to add that, through the kindness of the agent of the Peninsular and Oriental Steam Navigation Company, who has been so good as to transmit the packages free of expense, I have forwarded two cases containing all the specimens referred to in these Reports to the address of the Chief Clerk of the Foreign Office by the Peninsular and Oriental mail of this date. The larger of the two cases contains the specimens collected at Yedo, the smaller one those forwarded from Nagasaki and Osaka.

In my despatch of the 13th of January I mentioned that I had expended 77 dollars 23 cents (16l. 8s. 3d.) in making the Yedo collection.

I trust the information contained in these Reports will be found to possess some interest. I should have been glad if they could have been made more complete, but it has not been found easy to obtain information from Japanese informants engaged in the trade relative to the production of the raw material or the mode of manipulation.

The manufacture appears to be carried on in the interior provinces, and I have been repeatedly assured that no manufactory exists at the capital. Opportunity, therefore, of observing the process has not yet been met with at Yedo.

I have, &c.

(Signed) HARRY S. PARKES.

Inclosure 1.

Circular addressed to Her Majesty's Consuls in Japan.

Sir,

Yedo, September 24, 1869.

I FORWARD for your guidance in the preparation of the Trade Returns of your port for this year a copy of a despatch from Her Majesty's Principal Secretary of State for Foreign Affairs, pointing out the necessity of British trade being in future distinguished from foreign trade as far as this is practicable.

His Lordship also again calls attention to the circumstance of no Reports having yet been received from Her Majesty's Consuls in Japan on the subject of paper, and I have accordingly to direct you to give this subject of inquiry your best attention. If you find it necessary to incur some expenditure in pursuing this investigation, and in collecting specimens of the manufacture, I approve of your disbursing as much as 10l. sterling on this account without previous reference to myself; but before expending a

[313]

B 2

greater outlay you should explain to me the advisability of incurring it, and should await my instructions.

I do not doubt that the other points mentioned in Lord Clarendon's despatch will also receive your careful notice.

I also add copy of another despatch from Lord Clarendon directing that your Trade Reports should, in future, be accompanied by three summaries in the form inclosed, and which are required in addition to the other Returns which you should continue to furnish according to the form adopted last year.

Your, &c.
(Signed) HARRY S. PARKES.

Inclosure 2.

Consul Lowder to Sir H. Parkes.

Sir,

Kanagawa, July 2, 1870.

IN accordance with the instructions contained in your despatch of the 24th of September last, I have the honour to forward to you herewith a short account of the manufacture of paper in Japan, to which I have appended a list of the different varieties of that article made in the several principalities. To collect samples of all these would occupy some six months, and ten sheets of each would cost about 20*l.* sterling. Under these circumstances, and considering the facilities which a residence in Yedo affords for collecting specimens not only of the paper but of articles manufactured from it, I have thought it advisable to limit my expenditure under this head to a sum of about 4 dollars, the price of the illustrations which accompany the Report, trusting that the collection may be undertaken at the Legation.

I regret that the Report should contain so little information of the nature called for by Lord Clarendon, but my duties keep me exclusively at Yokohama, where there is no opportunity of witnessing the manufacture of paper or articles made of it; I have therefore been obliged to trust entirely to native sources for information, which is not as lucid or explicit as could be desired. I trust, however, that the Reports from other Consulates will supply the deficiencies in mine.

I have, &c.
(Signed) FRED. LOWDER.

Inclosure 3.

A short Account of the Manufacture of Paper in Japan, by Consul Lowder.

THE manufacture of paper from the paper mulberry (*Broussonetia papyrifera*) was introduced into Japan about A.D. 610. Up to the year A.D. 280, silk with a facing of linen was used for writing upon, and thin wood shavings were also employed. In that year, however, paper was imported from the Corea, and this appears to have been the only paper known to the Japanese until the year 610, when two priests named Donchô and Hôjô were sent over to Japan by the King of the Corea. Donchô is said to have been a clever man, learned in the Chinese classics, and moreover a skilful artist. Besides the manufacture of paper he also introduced that of writing-ink and mill-stones into the country. Shôtoku Taishi, a son of the reigning Mikado, learned of Donchô how to make paper. But although the paper made by Donchô was very good of its kind, it did not take ink well; it would not bear rough handling and tore very easily; and moreover it was liable, because of its material, to become worm-eaten, seeing which, Taishi introduced the manufacture of paper out of the paper mulberry; he made four kinds, called Unshi, Shiku-inshi, Haku-jushi, and Zoku-hakushi, and he caused the paper mulberry to be extensively planted all over the country, and the mode of paper manufacture to be largely promulgated among the people.

The Paper Mulberry, or Broussonetia Papyrifera (Ma Kôdzu).—(Illustration No. 1.

In the Island of Kiusiu the makôdzu is planted in the ninth and tenth moons, but in Kioto and its vicinity in the first moon, the time varying according to the climate of the place. Some old roots are separated and cut down to a length of about three inches; these are planted so that a little less than half-an-inch appears above ground. They

will grow about a foot high in the first year, and in the second they will rise to a height of two or three feet. In the third year they will reach a little over four feet; in the fourth year they attain to six, or if particularly fine, to even nine and twelve feet. Each year in the tenth moon they are cut down to the roots, and from each stalk five branches appear the next year, so that in five years a large and dense shrub is developed. The cuttings of the fifth year's growth are used for making paper. The roots will not thrive well in old ground; the best place for planting is round the edges of new-made ground or paddy-fields. They will not stand salt or brackish water, nor will they flourish beside millet or sorghum. Care must be taken not to over or under manure them; if under manured they die, and if too much manure is used the plant is injured. If planted in the vicinity of other crops, such as rice, they rejoice in the effects of the manure which is used for their neighbours. They are sometimes planted on mounds which are raised along the beds of valleys, but newly-turned ground is the best.

Cutting the Paper-Mulberry in Winter.—(Illustration No. 2.)

The paper-mulberry suffers from sun-burn in a very dry summer; and, on the other hand, if there is too much rain it grows too fast, and is then injured by the autumnal winds. Care must be taken to protect the plants from the ravages of wild boar and deer, which delight to feed upon them. The shrub known as "Ts'kuri-kake" is the best for making paper of, but it is scarce and expensive. There is also a variety called "kajiso," which makes good paper, but as it is more plentiful it is not so dear, though it is necessary to use a great deal of it. Another variety is called "takaso." Paper made of this is somewhat inferior, but the shrub attains a great height, and it is not necessary to divide the roots; a cutting of it may be planted just as it is cut, and will thrive, and it does not require so much attention as the "makôdzu" as regards manure; it will also thrive in swampy ground. It needs little care, and produces a tolerably large quantity of material for paper; and at present this variety is largely cultivated. The shrubs, like other trees, bud in spring, blossom in summer, and cast their leaves in autumn: by the twelfth moon they are quite bare.

Steaming the Paper-Mulberry.—(Illustration No. 3.)

The diameter of the boiler is 2 feet 6 or 7 inches; the steaming vessel is of straw. The mulberry stalks are cut into lengths of two and a-half to three feet for steaming. When the skin of the stalk begins to separate at the cut ends they are sufficiently steamed. Five or six steamings can be performed during a winter's night.

Stripping the Skin from the Stalk.—(Illustration No. 4.)

The stalks after steaming are taken in the hand as above illustrated, and the skin stripped off. After stripping the stick is of no use but for firewood.

Drying the Skins.—(Illustration No. 5.)

After peeling, the skins should be at once dried. They are divided into portions of a thickness that a woman can grasp conveniently in one hand. They are then hung on transverse poles and tied loosely at the ends, as in the illustration, so that the part tied may not be prevented from drying. They take ordinarily two or three days to dry, but if there is any wind they may dry in a day. After drying, they are weighed into portions of about 32 lbs. avoirdupois, and tied up in bundles.

Washing the Skins.—(Illustration No. 6.)

They are then ready for the next process, which is to wash them in running water in which they are left, as illustrated, for a day or a night, but twenty-four hours' washing will not hurt them. They are then taken in, and the inner fibre is separated from the outer skin.

Removing the Inner Fibre.—(Illustration No. 7.)

The outer dark skin is scraped off with a knife, as in the illustration, the knife being held stationary, pillowed on a straw padding, while the material is drawn towards the operator until the dark skin is removed. This dark scraping is used for making inferior kind of paper, known as "chiri-gami," and also "kizo-suki." It is called "saru-kawa," and after being thoroughly washed in running water, which causes it to open out flat, it is boiled. It is then allowed to rot, and is well beaten, after which

paper is made of it, as described further on, by admixture with the "tororo." In years when the paper-mulberry is scarce, this kind of paper may be made of the common mulberry ("kuwa no ki"). The mode of manufacture is the same, and the leaves are sometimes made use of.

Expressing the Sap.—(Illustration No. 8.)

Paper is made of the inner fibre, which is parcelled into lots of about 32 lbs. avoirdupois each. It usually takes three days to make the paper, but adepts can accomplish its manufacture in two. These parcels are taken to the river and thoroughly washed, after which they are steeped in buckets of water; the water is then run off and heavy stones are placed upon the fibre to express the remaining liquid. They are then boiled as in the following illustration, so that when removed from the boiler they are no longer sticky or glutinous. This fibre is called "sosori."

Boiling the "Sosori."—(Illustration No. 9.)

The diameter of the boiler is 2 feet 6 or 7 inches. A portion of the "sosori" is placed in the boiler, and two stirring-sticks, broad at the bottom and narrowed off at the top, are stood up in it; the remainder of the boiling is then scattered into the boiler by degrees (*vide* illustration). The lot is done in one boiling, but common water is not used. The "sosori" is boiled in water, in which the ashes of burnt buckwheat husks have been infused. While boiling it is stirred with the two sticks, one of which is held in each hand, and worked two and fro with a rotatory motion. It may be known to be sufficiently boiled if, when the stirring-sticks are removed, the water wells up from the bottom of the boiler through the holes left by the sticks, and spreads evenly over the surface of the boiling. Great care must be taken that it boils evenly. Occasionally it will be found that it will not boil, when about a quart of "robai" (wax-ash) thrown in will help it. Common lime will do as a substitute if "robai" is not at hand; but the admixture of either of these will slightly affect the colour of the paper.

Second Washing of the "Sosori."—(Illustration No. 10.)

The "sosori" is then placed in a basket, through which running water is allowed to percolate, in order that the residue of the ash infusion may be thoroughly expelled; the basket is then lifted up, and the water allowed to run off.

Species of the Plant "Tororo," which is cultivated in the same Manner as the Common or the Small Red Bean.—(Illustration No. 11.)

The "tororo" flowers in spring; the seed is inclosed in the flower, and is small and sexagonal in shape, resembling the sesamum. Neither the flower nor the seed are of any use in the manufacture of paper, but the root, of which the following is an illustration (No. 12), is used. The shrub is not unlike the cotton plant. There is also the wild "tororo," which is uncultivated, but which is used in the manufacture of commoner kinds of paper which are red in colour. The root of the "tororo" is taken during the rainy season of the fifth moon, after the flower has died and dried. The size of the root is about the same as that of the common dock, unless it grows in stony ground, when it is shorter. The sprouts and skin of the root are scraped off, and the root is then beaten. When required for use the "tororo" roots are boiled into a tolerably thin paste, a quart and a-half of which is required for each "boat" of the paper stuff. The "tororo" paste should be strained through a fine hair sieve into tubs, and may then be used as required.

Pounding the "Sosori."—(Illustration No. 13.)

The pounder is 3 feet in length, with a round handle, but square thence to the top. The table is 5 feet long, and about 3 feet broad, and 3½ inches thick. It may be made of oak or cherry.

The night before the paper is to be made the "sosori" should be again washed, and the next morning it is pounded for about as long a time as it takes to boil the rice for breakfast. When paper is made in the winter, a little "tororo" must be mixed with the "sosori" before pounding; when in spring, rice paste is used as a substitute.

Making the Paper called "Hanshi."—(Illustration No. 14.)

The bucket contains warm water in which to dip the hands when cold. The box or frame used in making "sugihara" (a large size of paper) is very heavy, so that men are employed in the manufacture of the latter; but women can manipulate the frames used for "hanshi."

The "sosori" to be used is made into a large ball, from which lumps are broken off as required. These lumps are cast into what is called the "boat," and thoroughly mixed with well-strained "tororo" paste. It should be stirred up thoroughly, and is of a proper consistency when the stick makes a slight noise when passing through the pulp. If not sufficiently sticky, more "tororo" should be added, but the proportion of the ingredients can only be learned by practice.

The pulp should not cling to or wind round the stick, but should be thoroughly stirred and well mixed.

(Illustration No. 15.)

- a. The inner frame.
- b. The outer frame.
- c. The false bottom, made of plaited bamboo.
- d. The sieve.
- e. The brush.
- f. The stirring-stick: length, 1 foot 3 inches; diameter, about a $\frac{1}{4}$ of an inch.

(Illustration No. 16.)

The "boat:" length 6 feet; breadth 3 feet, with a perpendicular rest for leaning the frame against in it.

The false bottom is placed in the outer frame, into which a portion of the pulp is then poured. The inner frame is then fitted in to keep the false bottom steady, and a peculiar and dexterous jerk is given to the whole, which sets the paper. The frame is then leaned against the upright rest to allow the water to drain off, while another frame is prepared. By the time the second frame is ready the first may be removed. This manipulation can be performed very quickly by experts in the manufacture.

The winter manufacture, which is made with "tororo" only, is called "kidzuki:" it is used for making books, and it does not get worm-eaten; it is the best paper made. The spring manufacture, in which rice paste is used, is liable to become worm-eaten.

Drying the Paper.—(Illustration No. 17.)

The sheet of paper is removed from the frame with a piece of bamboo, as seen in the illustration, by dexterously curling the thicker end of the paper round it; the brush is taken in the right hand, and with it the paper is laid on the drying-board, as seen in the illustration, the side which adheres to the board being the face of the paper. Five sheets are placed on each side of the board, which is 6 feet long. In fine weather the paper dries quickly, and in wet weather it is sometimes dried by the heat of a fire. Each manipulator requires forty drying boards.

Cutting "Hanshi" into Proper Sizes.—(Illustration No. 18.)

Between every 20 sheets two or three straws are inserted. The paper, in parcels of 100 sheets, is then placed upon a table, and a heavy ruler put on the top of it, which is kept steady with the right foot. The paper is held in the left hand, and cut off with a knife, as in the illustration. It is then packed, as seen in *Illustration No. 19*, and is finally made up into bundles ready for the market.

Mode of making Paper Cloth warranted to wash ("Shifu").—(Illustration No. 20.)

Take some of the paper called "hōshō," or some of the best "senka," and dye it of the colour required. Boil some of the roots called "kon-niaku-no-dama" with the skins on; try them with the inner portion of a rice stalk; when it penetrates easily they are sufficiently boiled. Peel them and let the water run off, and then pound them into a paste. Spread this paste on either side of the paper, and let it dry in the sun till quite stiff. Then sprinkle water on it until it is thoroughly damped, and leave it in that state for a night. The next morning roll it upon a bamboo of the thickness of

the shaft of an arrow, and force it with the hands from either end into a crumple in the centre; unroll it, and repeat this process two or three times, rolling it from each side and corner of the paper. Then crumple it well in the hands by rubbing it together until it becomes quite soft, and then sprinkle water on it again to damp it. Pull it out straight and smooth, fold it up, and pound it with a wooden mallet. It may then be put into water as much and as often as is liked without sustaining injury, having become a strong and lasting material. This cloth is made principally in the Daimiate of Sendai. Boxes, trays, and even saucepans, may be made of this cloth; and saucepans thus manufactured sustain no injury over a strong charcoal heat. Bags may be made of it, in which wine may be put, and heated by insertion in boiling water. Paper thus prepared may be used for papering windows; and will withstand the rain without being oiled. Amusing experiments may be made with it.

Manufacture of Oil-Paper for Rain-Coats, &c.

The paper should be "senka" or "tosa-senka." The glue used for joining the paper is made of young fern-shoots, ground and boiled into a paste ("warabi-no-ko-nori"), and thinned by admixture with the juice expressed from unripe persimmons. The dye is usually green, yellow, red, or black. Whichever colour is used, the colouring matter, generally a powder, is boiled with bean paste, and the paper is then painted with it. The preparation of the paper consists principally in softening it by rubbing it in the hands. The oil used is a seed-oil called "ye-no-abura."

LIST of the Varieties of Paper Manufactured in Japan.

District where manufactured.	No.	Name of Paper.	Remarks.
Yamashiro	Kiô-no-Kotaka	1 ft. 1 in. by 1 ft. 5 ins. Used in the manufacture of articles of various kinds.
	..	Senmen-gami	} Used for making fans.
	..	Ji-gami Sh'ta	
	..	Nuno-me	
	..	Chirimeu-morni	
	..	Kiose no Shikishi	} Used for writing verses and songs upon.
	..	Kiose no Tanjaku	
	..	Kiose no Kaishi	
	..	Shisen	
	..	Man-nen Gami	Memoranda.
	..	Kiô no Chigo Gami	Used for inclosing the fish skin which accompanies presents.
	..	Yukinari Gami	Ditto Ditto
	..	Kiu-yukinari Gami	Used for dressing dolls, and such like purposes.
	..	Hombeni torinoko	For lining boxes.
	..	Haku-oshi-Gami	For framing scrolls.
	..	Suzu-Gami	} For screens, pictures, &c.
	..	Hakudanshi	
	..	Suishi-Gami	
	..	Bek'ko Gami	} For the edges of scrolls.
	..	Inkin-shi	
..	Kiyarabiki Gami	Ditto Ditto	
..	Muji-Gami	} Used by priests for enveloping presents from temple to the Government.	
..	Tsuka moto Gami		
Yamato	Uda-Gami	} For account books, umbrellas, and papering slides.
	..	Kon-uda	
	..	Honzome	} For papering hats and umbrellas.
	..	Ha-zome	
	..	Katamen	
	..	Shi-uda	For wrapping incense in.
	..	Kasa Gami	For papering common umbrellas.
	..	Yoshi no yawara Gami	For straining lacquer, also for wrapping precious things in.
..	Misu-Gami	For papering backs of scrolls, also for making artificial flowers.	
Setsu	Kidzuki-o-maniai	Writing paper.
	..	Shiro-maniai	Writing and drawing paper.
	..	Iro-maniai	Ditto Ditto.
	..	Torinoko	} For papering screens, scrolls, &c.
	..	Kidzuki	
	..	Dodzuki	
..	Makatadzuki		

District where manufactured.	No.	Name of Paper.	Remarks.	
Setsu (continued)	..	Biobu-maniai ..	The last paper placed on screens before putting on the gold colour.	
	..	Go-shiu in maniai ..	For official purposes, such as drawing title deeds, &c.	
	..	Kuro-minato Gami ..	Used for papering tea-boudoirs, &c.	
	..	Asagi-minato ..		
	..	Nedzumi-minato ..	Copying paper.	
	..	Hon-usu-yô ..		
	..	Hon-chikushi ..	Despatch paper.	
	..	Nashiwo bôshô ..		
	Suruga	..	Sen-nen Gami ..	For papering slides and screens.
		..	Hanshi ..	Letter paper.
..		Chiri-ban-kire ..		
..		Han-kire ..	Used for the wicks of candles, also for handkerchiefs.	
..		Iro-ban-kire ..		
..		Chiri Gami ..	For handkerchiefs.	
..		Kobanshi ..	Tracing paper.	
..		Sumban ..		
..		Usuyo ..	For wrapping money and medicines in.	
..		Wada-atsu ..		
Kai	..	O-nobi ..	Letter paper.	
	..	Hom-ban-no nori ..		
	..	Keujaku-ban Kire ..	Handkerchiefs, books, &c.	
	..	Koshin-banshi ..		
	..	Koshin-ko-banshi ..	Memorandum books and wrapping paper.	
	..	Koshin hoso Kawa ..		
	..	Kohshin Kohaka ..	Letter paper.	
	..	Kô-ban Kire ..		
	..	Konishi no uchi ..	Memoranda, &c.	
	..	Awodosa magaye ..		
..	Kidosa magaye ..	Papering screens, &c.		
..	Hom-ban ..			
Idzu	..	Han-kire ..	Wrapping medicines in.	
	..	Ko-ban-kire ..		
	..	Kenjaku-han kire ..	Letter paper.	
	..	Gampishi ..		
	..	Shômotsu Gami ..	Tracing paper.	
	..	Hôsho-ban ..		
	..	Nishi nouchi ban ..	Making books and copying.	
	..	Mino ban ..		
	..	Kongiku ban ..	Letters, books, &c.	
	..	Gampi ban kire ..		
..	Go-unsen ..	Best.		
..	Shorinshi nori Gami ..			
..	Chôka-sen ..	Good.		
..	Zui-ko-sen ..			
..	Gampi Koshi bari Gami ..	Pretty good.		
..	Fusuma Gami ..			
..	Matsukawa iri ..	Inferior.		
..	Awonori iri ..			
..	Ishime ..	For bordering.		
..	Ebôshi ..			
Musashi	..	Chiri-kongiku ..	Handkerchiefs.	
	..	Shinzenji Gami ..		
	..	Hosokawa ..	Papering screens, &c.	
	..	Yama-kobanshi ..		
	..	Chichibu-kobanshi ..	Memoranda, &c.	
	..	O-oki ..		
	..	Onishi ..	Handkerchiefs.	
	..	Yama santome ban ..		
	..	Yama-uda ..	For making 1 lb. medicine bags.	
	..	Yama uda chiri ..		
..	Hosokawa chiri ..	Medicine and money wrappers.		
..	Kuro kawa chiri ..			
..	Jôroku ..	For wrapping pieces of cloth or linen in.		
..	Nami-roku ..			
..	Nedzumi-ban ..	Paper bags.		
..	Chiri-suki ..			
..	Shiro chiri Gami ..	Sugar bags.		
..	Kuro-ban ..			
..	Nedzumi ban kire ..	Under papering.		
..	Shiro ..			
..	Nedzumi koban ..	Handkerchiefs.		
..	Akamiji ..			
..	Awomuji ..	Lining borders of mats.		
..	Hariko ..			
..	Shiro hariko ..	Letter paper.		
..				
..		For papering boxes, &c.		

District where manufactured.	No.	Name of Paper.	Remarks.		
Musasbi (<i>continued</i>)	Kuro hariko	} For papering boxes, &c.		
		Kon midzu dama			
		Akaban hariko			
		Koshi bari Gami			
		Akamatsu ba			
		Asagi i shime			
		Awomatsu ba			
		Shiro i shime			
		Nedzumi i shime		} Bordering.	
		Nori-iri			
		Koshi bari Gami			
		Koban			
		Jimasa			
		O-hiro Gami		For tobacco pouches, &c.	
Hitachi	Mito-han-kire	Letter paper.		
		Mito nishi no uchi	Memoranda, &c.		
Shimotsuke	Mito bôsho	Wrapping paper.		
		Homba nichu noushi			
Kô-tauke	O-chômen Gami			
		O-has-sun			
		Chin-has-sun			
		Hodogura	Drawing deeds, &c.		
		Hon santome-ban	For wrapping linen and cloth in.		
		Nasu-ôtaka	For Daimio's use, wrapping presents in, &c.		
		Ai-jaku han kire	Letter paper.		
		Shiwo ko Gami	For papering lanterns.		
		Ju-monji	For making rain-coats.		
		Kadzuye Gami	For ornamental purposes.		
		O-hata	Hikoma	For straining oil.
				Itahari	
		Shinano	Bunshichi Gami	For tying the hair.
				Hikomahashi kiradzu	For writing manifests on.
Mino	Shôji Gami	For papering slides, writing, &c.		
		Mon-shôji	Used for papering, especially temple slides, &c.		
		Okaki mono	For books and official purposes.		
		O-nawoshi	Official documents.		
		Chin-nawoshi	Inferior book paper.		
		O-sa dame nawoshi			
		Take-naga	For female hair ornamentation.		
		Jenyn-jo	Wrapping silver and fine lacquer in.		
		Usu-shôji	For papering lanterns and windows, also for writing on preparatory to engraving.		
		Kogiku	For handkerchiefs.		
		Chiri-kogiku			
		Ita-hari			
		Gampishi	Drawing paper.		
		Usu-yô	Tracing paper.		
Mutsu	Asagi-ban-kire	Letter paper.		
		Iwaki-nobe Gami	Papering slides, or making books and writing on.		
Echizen	Otake-danshi			
		Chin-taka	} For official purposes.		
		Ko-taka			
		Gosho-hosho-ô-hiro	} Wrapping presents in.		
		Gobu-biro			
		Masashi-bôsho			
		Airoku-bôsho			
		Mako-bôsho	} Letter paper.		
		Goshiki-bôsho 5 colours.	
		Is'shiki-bôsho			
		Kidzuki-ô-maniai	} For papering screens, &c.		
		Kidzuki-ton-no-ko			
		Unshi			
		Chiri-unshi	} For lining boxes, &c.		
Goshin in maniai					
Kaishi maniai					
Aida bôsho					
Tsukinari bôsho					
Hôsho-han-kire					
Kaga	O-bôsho	} Letter paper.		
		Chin-bôsho			
Tango	Sugi-hara Gami			
		O-bôsho	Letter paper.		
Inaba	Sugi-hara			
		Kaida	For books, &c.		
Bitchin	Kikaida	} For official purposes		
		Otake danshi			

District where manufactured.	No	Name of Paper.	Remarks.
I mo	..	Han-kire ..	} For official purposes.
		Unshin bankire ..	
Iwami	..	Shôji Gami ..	} For papering slides.
		Jô-suki-hanshi ..	
		Chin-suki-hanshi ..	} Letter paper.
		Iwami-banshi ..	
		Ichiyama-banshi ..	
		Tejiro-banshi ..	
		Tsuwano-banshi ..	
		Hanshi ..	
Aki.	..	Shiro kata ..	} For making umbrellas.
		Shima chiri ..	
		Watari chiri ..	
		Hiro shima bôsho ..	
		Hiro-ori ..	
		Iwakun hanshi ..	
Suwo	..	Iwakimi chin chiri ..	} Letter paper.
		Iwakimi hankire ..	
Nagato	..	Yama shiro hanshi ..	
		Te shiro hanshi ..	
		Gokamure hanshi ..	
		Chôsin hanshi ..	
		Kumage hanshi ..	} Letter paper.
		Tokuyama hanshi ..	
		Tokuji hanshi ..	
		O-gawa hanshi ..	
		Hanaoka hanshi ..	
		Suzu no kawa hanshi ..	
Awa	..	Senka ..	} For making rain-coats.
		Awa no take naga ..	
Iyo.	..	Osu-banshi ..	} For handkerchiefs, &c.
		Ozu-shirokata ..	
		Ozu-kurokata ..	
		Osu-chinbo ..	
		Osu-seuka ..	
		Iyo-masa ..	
		Saijo ..	} For making pocket books, &c.
		Senka-homba ..	
		Meitoku hanshi ..	} Drawing paper.
		Meitoku chin ho ..	
		Meitoku kuro ho ..	} Ditto and making fans.
		Honkuchi hôsho ..	
Josa	..	Hon-koge-kenjo-gami ..	} For making rain-coats, pouches, &c.
		Hon-koge asagi-tosa ..	
		Yakutaishi ..	} Letter paper.
		Beni-tosa ..	
		Kuro do sa ..	} For pouches, rain-coats, &c.
		Awo do sa ..	
		Kon do sa ..	} For wrapping medicines in.
		Asagi do sa ..	
		Tosa banshi ..	} For making bags for tooth powder, &c.
		O-banshi ..	
		Ko-banshi ..	} For papering.
		O-sugi hara ..	
		Josa-hankire ..	} For writing, books, drawing, &c.
		Josa-hon-seuka ..	
		Hon-kenjo-gonjo-gami ..	} Letter paper.
		Josa-chiri ..	
		O-han-chiri ..	} Letter paper.
Chikiyo	..	Usuki-banshi ..	
		Saigi-banshi ..	} Letter paper.
Hizen	..	Karatsu-banshi ..	
		Koshiro-banshi ..	} Letter paper.
		Koshiro chiri gami ..	
Hinga	..	Nobe oka hanshi ..	} Letter paper.
		Hinga take naga ..	
		Hinga ko take naga ..	} Letter paper.
		Hon-hinga-han-kire ..	
		Hinga ban kire ..	} Letter paper.
		Nobe oka chin ho ..	
		Omono chiri ..	} For handkerchiefs.
		Mornota gami ..	

British Consulate, Kanagawa, July 2, 1870.

FRED. LOWDER, Consul.

Inclosure 4.

Acting Consul Annesley to Sir H. Parkes.

Sir,

Nagasaki, September 2, 1870.

REFERRING to your despatch dated the 24th September, 1869, inclosing copy of a despatch from Her Majesty's Principal Secretary of State for Foreign Affairs, on the Returns of Trade and Shipping forwarded annually from Her Majesty's Consulates in Japan, I have noted that the Earl of Clarendon calls attention to the circumstance of no reports having yet been received from Her Majesty's Consuls in Japan on the subject of paper. I have the honour to state that, in conformity with your instructions, I have given this subject my best attention, and have gathered information from every reliable quarter.

Nagasaki, however, contains but one paper manufactory on a small scale, and where only the coarser quality of paper is made. With the above exception all the paper used at this port, comes from the various manufactories in Kiusiu and other parts of Japan. From personal observation of the method employed in paper making from the bark of the kaji tree, I have been enabled to gather a few particulars which, I trust, may prove of some interest. These particulars, together with some details of the paper-tree called kaji, I have embodied into a Report, which I have the honour to inclose herewith.

In elucidation of this Report I have collected numerous specimens of articles exclusively manufactured from paper for the inspection of Her Majesty's Government.

These articles are contained in a box which I have forwarded to your address by the Pacific mail-steamer "Oregonian," leaving this day for Yokohama.

Acting upon the authority contained in your despatch above referred to, in which you are pleased to sanction a disbursement of 10*l.* in collecting specimens of the paper without previous reference to yourself, I beg to state that I have expended a sum of 25 dollars in pursuing the investigation, and in collecting the specimens of the manufacture. I trust this outlay will meet with your approval.

I have, &c.

(Signed) A. A. ANNESLEY.

 Inclosure 5.

Particulars regarding the Japanese shrub "Kaji," and the Method employed in the Manufacture of the Paper from its Bark, with Description of the various Forms the Paper is afterwards made to assume.

THE kaji tree grows more or less all over Japan, and is cultivated much in the same manner as the tea plant and mulberry tree. It grows to a height of some 6 or 8 feet, and thrives best in dampish ground. In some districts it is produced on the hill sides. The bark is stripped off in the autumn, and is at once ready to be used for paper making. The branches are left either to decay or are cut away, and fresh shoots are produced before next autumn, when the same process is gone through. The tree or shrub of the kaji resembles the willow of our country, and thrives well near water and in a mild climate. It is, however, also found in the north of Japan, but does not flourish in such perfection in a cold region.

This shrub is extensively cultivated throughout Kiusiu.

There is another species of tree grown in Japan, from which paper is made: it is called "mitsumata," and, like the kaji, is found chiefly in Kiusiu. The bark of the mitsumata is, however, but little used in the general manufacture of paper, but the paper currency of the country is made exclusively from this bark.

The price of dried bark of the kaji in the country ranges from 3 dollars 75 cents to 4 dollars per picul (133½ lbs.)

There are no reasons why the kaji tree should not flourish in England, more especially if planted in a damp soil, and when it is considered that paper could no doubt be manufactured from this bark at a cheaper rate than it could be made from rags, added to the considerable strength it can attain, and the various useful purposes

to which it can be applied, the cultivation of the kaji shrub in England is well worthy of a trial.

Some inquiry after this bark has been made by home paper manufacturers from merchants at this port, and samples have been sent to England, where its value will no doubt be appreciated and turned to account.

Method employed by the Japanese in the Manufacture of Paper from the Bark of the Kaji Tree.

The rough bark is soaked in water for several hours, and the outer rind separated; it is then again washed, then boiled, after which it is beaten with mallets until it forms a sort of pulp. The manufacture of the paper now commences, and is carried on as follows:—The pulp is placed in a sort of reservoir about 6 feet square and 1 foot deep, containing cold water, and is stirred about with a large flat ladle made of wood until it is entirely dissolved. A sort of size (obtained from the inner bark of a tree called "ousuke" soaked in water) is mixed with the preparation, which is now ready to be drawn up, and is effected by the help of two frames made of wood and bamboo, of such dimension as the sheet of paper is intended to assume. Between these two frames a very thin matting of bamboo is placed, which acts as a sieve, and when the preparation is drawn up, it is moved on this frame, till the required substance is obtained. The sheet thus made is then deposited on another sieve. The same process is recommenced, and when another sheet is ready it is placed over the first; a strip of straw is laid on the edge to separate each sheet, so as to obviate the risk of their adhering together, and to enable each sheet to be taken up separately. When about a dozen sheets have been thus formed into a layer, they are taken up singly and spread on boards to dry in the sun. By the same process old paper is made into fresh sheets, with the addition of a size obtained from the decoction of a creeper called "sane kadzura," which grows on the hills around Nagasaki, and gives consistency to the solution. The manufacture of old paper into new can apparently be repeated as often as desired.

The imitation leather paper is made by mixing oil with the pulp: in the same manner all waterproof paper is manufactured. The juice of persimmon is sometimes used in making paper intended to resist dampness. Among the samples made of paper forwarded with this Report will be found the branches of the kaji, with the leaves on them, No. 1. The rough bark, as taken from the branches, No. 2. The same bark partially prepared, No. 3. And likewise when in a state of pulp ready to be manufactured into paper, No. 4. Also branches of the creeper called "sane kadzura," from which the size is obtained, No. 6.

With the few exceptions mentioned below, the specimens forwarded with this Report do not require any special explanation.

They are all made of paper manufactured from the bark of the paper-tree. In some instances varnish of various hues has been applied to give the article a finished appearance.

It will be observed how wonderfully proficient the Japanese are in rendering to paper the hardness and weight of heavy wood, and manipulating it in all sorts of shapes. Some of the common paper made is so tough that it can only be torn with difficulty. Coats, hats, shoes, umbrellas, boxes of all kinds, ornaments of all descriptions, pocket-handkerchiefs, fans, &c., are made from paper; in fact, a Japanese will turn paper into a hundred useful forms. The following information on some of the articles forwarded may prove interesting:—

No. 12 is a net coat worn next to the skin in warm weather by the better class of Japanese. It is manufactured by rolling strips of strong paper of equal size into a sort of string, and then worked by hand into a neat net pattern. It takes some days to complete a garment of this kind, and it will bear washing.

No. 13 is of the same kind, only of a cheaper quality.

Nos. 7 and 8. Hats worn by the higher class of Yakunins. It is worked into a very heavy substance by placing many layers of paper over each other until it attains a very hardy and wood-like material. Varnish is then applied to render it waterproof.

Nos. 9 and 10 are paper hats worn by different classes of Japanese, and are worked to resemble straw hats by the paper being twisted and then plaited, shaped, and varnished. The folding hat is generally worn by the soldiery.

No. 11 shows the frame of a paper hat before it is fixed into shape and varnished. Its extreme strength and tenacity are remarkable.

Nos. 14 and 34. Paper box and cover for sandals will exhibit the kind of paper made to resemble leather. It is much used by the natives, and is very well adapted for binding books, covering boxes, &c.

Nos. 49 and 50. Wall-paper; it will be observed that great taste is displayed in some of the patterns.

Nos. 54 and 58 shows the different kind of common paper manufactured in Japan.

Nos. 30 and 31. Paper coats, excellent and light waterproof covering.

No. 5. Frames used in drawing up the solution from the water. The bamboo sieve is between the two frames, and sheets of paper are placed upon it, with the strips of straws showing how each sheet is kept separate after it is made.

The Japanese are acquainted with the method of manufacturing paper from rags, but never adopt it, preferring to make their paper from the bark of trees.

LIST of Articles forwarded, all made of Paper, and Numbered as follows :

- | | |
|--|--|
| No. | No. |
| 1. Branches of the Kaji tree as fresh cut. | 31. Waterproof coat, green. |
| 2. Rough bark as taken from the branches. | 32. Letter box. |
| 3. Same bark partially prepared. | 33. Ditto. |
| 4. Ditto in a state of pulp. | 34. Covers for rain sandals. |
| 5. Frames, &c., used in drawing up the preparation for paper making. | 35. Cord for sandals. |
| 6. Creeper, called Sane Kadzura, used for size. | 36. Toy. |
| 7. Hat worn by higher class of Yakunins. | 37. Hair strings. |
| 8. Ditto. | 38. Hair-pins. |
| 9. Ditto, worn by different class of Japanese. | 39. Purse. |
| 10. Ditto. ditto | 40. Man's tobacco pouch. |
| 11. Frame of a paper hat. | 41. Woman's ditto. |
| 12. Coat of fine net work. | 42. Pocket-book. |
| 13. Ditto, of inferior quality. | 43. Ditto. |
| 14. Box to contain paper. | 44. String specially used for tying up presents. |
| 15. Ditto. | 45. Fans. |
| 16. Toy box. | 46. Paper for screens. |
| 17. Flat hat worn by the soldiery. | 47. Ditto, wrapping up medicine. |
| 18. Woman's toilet box. | 48. Ditto, waterproof oil, used for wrapping raw silk, &c. |
| 19. Box containing female hair ornaments. | 49. Ditto for walls and screens. |
| 20. Folding-box. | 50. Ditto for walls. |
| 21. Rain umbrella. | 51. Ditto, prepared with persimmon juice to resist damp. |
| 22. Sun ditto. | 52. Ditto for letters. |
| 23. Telescopes. | 53. Ditto, common quality for walls. |
| 24. Mask. | 54. Ditto, different kinds. |
| 25. Lanterns. | 55. Ditto for letter writing. |
| 26. Fans. | 56. Ditto, ordinary. |
| 27. Fan made by Coreans, and used after dipping it in cold water. | 57. Ditto, despatch. |
| 28. Account book. | 58. Ditto, common, for wrapping parcels, &c. |
| 29. Picture ditto. | 59. Ditto, coloured, used for ornaments, &c. |
| 30. Waterproof coat, black. | 60. Ditto, used for making umbrellas. |

(Signed)

A. A. ANNESLEY, *Acting Consul.*

British Consulate, Nagasaki, September 2, 1870.

Inclosure 6.

Report by Consul Enslie on the Manufacture and Use of Paper in Japan.

IN India the canonical books were in ancient times written on leaves; these books were, in the language of the country, styled "bairatayo."

In China, leaves and thin slips of bamboo were used.

Up to, and during the cycles of Taika (645 A.D.) and Hakuchi (650 A.D.) the sacred books of Japan were written upon long rolls, and the reverse side was used for ordinary writing purposes.

Kakinomoto H'tomaru, Lord of Iwami (one of the western provinces of Japan) instructed his retainers during the cycles of Kei-un (704-708) and Wado (708-715) in the art of making paper; he died in 729.

The celebrated house of O-uchi-uji, at Yamaguchi, in the province of Suwo, had by this time existed for many ages, and its fame had reached as far as China; one of the heads of this family greatly improved the manufacture of paper, and such was the renown of that made in his provinces of Siki-cho-ho (Iwami, Nagato, and Suwo) that people not only came from all parts of Japan, but also from foreign countries to purchase it.

It may here be mentioned that the last Lord of this great house was murdered during Taiko's time by one of his principal retainers, Suyè owarino Kami Harukata, in 1551. Four years later the faithless Suyè was killed by Mori Motonari, another karo of the O-uchi house and an ancestor of the Choshiu family. This Mori Motonari provided, in 1560, the funds required for the "Go sokui" (public proclamation and ceremony of accession to the Throne) of the 107th Mikado Okimachino-iu, 1558-87. In return for this loyal act he received permission to wear the Imperial crest and style himself Daidsenno Daibu. The family is still known by this name.

The author of the "Kami dsuki choho ki," who gives the following description of the manufacture of paper, states, with the self-conceit peculiar to all Asiatic nations, that Japanese paper is far superior to that of other countries, and that it was first made in the districts of Kano-ashi and Mino in Iwami, as also in the neighbouring towns of Toshu, Yoshiu, and Oden.

Iwami is one of the provinces belonging to the westerly division of Japan known as the "Nankaido."

The Makoso or Paper Plant.

The time for planting the makoso varies; in the western provinces it is planted in the 9th or 10th Japanese month (the end of September to the commencement of December); in the neighbourhood of Kioto and Osaka, however, it is planted in the 1st month (February).

The branches are cut off to within about 2½ feet of the ground, and soil is then heaped up round the old root to within about 3 or 4 inches of the top of the stump; the new shoots average about five every year, so that in five years it is a good-sized tree about 9 or 10 feet high, when it is cut down and used to manufacture paper.

If planted in a new field or on a bank it will grow well, not, however, in rich soil. It requires a little manure and will not flourish in brackish soil or in the neighbourhood of a field of millet. It will grow well on the slope of a hill, in a valley, or on a bank near a patch of water; excessive heat will blight it, and continuous rain will prove injurious. Care should be taken to prevent wild boar from getting at it, as it is considered a great luxury by that animal.

The "makoso" is also called "tsukakè," and the price is about 6 tempos 40 cash (about 4d.) for 1,000 mis about 8½ lbs. avoirdupois) of seed.

The "kajiso," is a plant which is also used to make paper of; it does not yield so much as the "makoso," and is therefore only one-half the price of the latter.

The "takaso" is also a plant from which paper is made; it grows to a greater height than the "makoso" and the branches which are not immediately required can be again planted and will soon strike root. The quality of the paper made from this plant is, however, inferior to that of the "makoso" and "kajiso."

It does not require manure nor such care as regards the soil in which it is planted. The amount of paper which can be produced from it is larger than from the first-mentioned plant. It was first cultivated during the Kanséi cycle, or about 1789; the average price of the seed is 500 cash (about 3½d.) for 1,000 mis.

It blossoms in the summer and fades about the 10th month, when it is either cut down and sold, or sold while still standing.

The inhabitants of the northern provinces say that if a wild boar is killed in the neighbourhood of a takaso and buried there, a second one will never come near it.

The average price is about 1s. 1d. for 250 lbs. avoirdupois of the raw material; out of this the bark, when stripped off, will weigh about 41 lbs. The wood itself is used as firewood.

After being cut down, the branches of any one of these plants are cut into lengths of 2½ to 3 feet, put into a pot and steamed until the end of the bark is seen to loosen; the pot is about 2 feet 6 or 7 inches in circumference, and one day's work is from five to six potsful.

The bark is then stripped off with the fingers and the wood used for the previously-mentioned purpose.

When people are very poor they club together, hire a pot in which to steam the branches, and give the wood, after the bark has been peeled off in lieu of money for the use of the pot,

Immediately after the bark has been separated from the inner wood it is hung up

to dry; this usually takes two or three days, and it is then made up into bundles weighing 41 lbs. It is afterwards packed on horses, one load being six bundles, and sent to different parts of the country.

The price of the dried bark varies from 18 tempos (about 1s.) to 40 tempos (2s. 2d.) per bundle of 41 lbs.; if the season has been bad it sometimes is as high as 3s. In the eastern part of the province of Iwami the price is 20 to 30 per cent. cheaper than in other parts of the country.

Preparatory to separating the outer and inner bark it is soaked in water during from twelve to twenty-four hours. The black outer bark is called "sarukawa," and is used in making a coarse kind of paper called "chirigami."

The best kind of coarse paper made of "sarukawa" is very strong, and is called "shosodsuki." The price of the outer bark is about 1s. 4d. for 82 lbs.; it is an important article of merchandize, sent from Iwami to Iwakuni, in the province of Suwo, and Ogata and Otakè in the province of Géishiu.

In order to manufacture this paper, the outer bark is washed, boiled, and allowed to putrefy; it is then well beaten and mixed with "tororo" (the roots of the egg plant). If the makoso is scarce, mulberry leaves are mixed with it. The remaining part of the process is similar to that used for the inner bark, and will be afterwards explained.

The "sarukawa," having been taken off, the inner bark is repeatedly washed in order to remove the glutinous matter adhering to it, and boiled.

The "sosori" (inner bark) is then mixed with buckwheat-husk ash and again well boiled; a little wax or lime may also be added in some cases, as the process will be more speedily completed. The paper will, however assume a reddish hue. The contents of the wooden vat should be frequently stirred while undergoing the boiling process.

The author of the work from which these extracts are made says that great difficulty is sometimes experienced in steaming and boiling the bark, and asserts that it is generally believed to be the work of the Inugami, or devil. As regards iron foundries he also says:—"It is a well-known fact that the molten metal will not, in some instances flow from the orifice of the crucible;" this he also attributes to the same cause, and states that prayers offered up to the Deity have in both cases proved efficacious.

After having been thoroughly boiled, the bark is again washed in a stream with a view of removing all extraneous matter. It is then hung up and the water allowed to drain off.

The "tororo" is plant which blossoms and brings forth a fruit bearing a great resemblance to the *Sesamum Orientalis*. The root, which is about four-fifths of an inch long, is only used. When the flowers have faded it is dug up and allowed to dry during the rainy season. When required for use the outer skin is peeled off; it is then made into powder, mixed with water, strained through a sieve, and kept in a small bucket until wanted. One sho (111½ cubic inches, or nearly 3 pints) of "tororo" is required for 41 lbs. of "sosori."

When manufacturing paper the "sosori" must be well washed the previous evening and pounded on a board next morning; during the winter "tororo" is mixed with it and in the spring a little flour must also be added.

The manipulation in making Hanshi (a thin kind of paper used for various purposes) is easy, and women are therefore frequently employed; in making "sugihara" and other thick paper male labour is required.

The "sosori" and "tororo" having been well mixed, this pulp is put into a large trough filled with water; great attention must be paid to the exact amount of "tororo" required.

A mat made of bamboo and horsehair, and placed between two small wooden frames, is then inserted into the trough, and a certain amount of pulp sufficient to cover the mat is collected on it; the wooden frames are then opened, and the mat is placed edgewise on a framework at one end of the trough, to allow the water to drain off during a short time. The mat is then removed, and the sheet of paper which has been made is put on a plank called "toko," and left to dry. The size of the trough is 6 feet by 3, and a skilful workman can go through the various manipulations with great rapidity. The right side of the paper is that nearest to the board.

Paper made during the winter, when only tororo is added, is called "Kidsuki" it is of a very superior quality, and will not become worm-eaten for many years. This is the best kind of Iwami paper.

That made in the spring, to which starch (probably made of rice) is added, is not so good.

At Najiwo, in Settsu, a province belonging to the Gokinai, or great central

division of Japan, "near the Imperial residence," isinglass is added; starch is however used in the other provinces.

When thoroughly dry the paper is cut to its proper size, and packed up in "oris," each containing twenty sheets; ten of these make a "soku" or gogo, ten soku make one "shimè," and six shimès one balc.

The work whence these extracts are made was written in the tenth year of the Kansée cycle (1798), and prices have increased very considerably since then; this will be clearly seen on referring to the list which accompanies the various samples of paper, the manufacturing process of which is still the same.

Paper is now generally made throughout the whole of Japan, the principal paper-producing provinces being:—

Iyo, where the principal manufactures are goyoshi, hosho, séicho, toshi, takènaga, hankiri, rasagami, &c.

The eastern provinces, such as Musashi, Sagami, Surunga, Awa, &c., produce nishino uchi, santomi, rataori, and several other kinds.

Iséi, Musashi, Kishiu, and Setsu, are the principal shibori producing provinces.

Géishiu supplies morokuchi, hanshi, and chirigami.

Mino has minogami, onaoshi, and tengujo.

Yéchidsen has otaka, danshi, kobosho, mani-ai, and usuyo.

Yamato supplies yuton.

Kinsatsu or bank-note paper is principally made at Najiwo, in Settsu, and in Yéchidsen.

Although these various kinds of paper are principally made in the above-mentioned provinces, they are also manufactured in other parts of the country.

The numbers on the inclosed list correspond with those on the various samples, which in many cases represent several specimens of one kind of paper. Although Nos. 57 to 87 inclusive cannot actually be said to represent different classes of paper, they have been added with a view of conveying an idea of the various forms paper is made to assume, and the use made of it in Japan.

In addition to the use assigned in the list to Hosho and Lukehara, these two kinds are also used for making the paper ornaments which are the indispensable adjuncts of the ancient religion of Japan.

The presentation of these paper sacrifices to the Daingung of Iséi, a god, and the father of the first Japanese Sovereign Jimnu Tenno, is an important ceremony which precedes the accession to the Throne of each native monarch.

Shibori (No. 41) is a peculiar kind of paper, bearing some resemblance to leather; it is made of senka (No. 15) which is pasted together, the number of sheets varying according to the thickness and quality required. When dry it is saturated with oil extracted from a plant called "yè" (*Celtis Willdenawiana*); it is then pressed on blocks of wood prepared with the required pattern. After this it is varnished and dried.

Yuton is also made of layers of thin paper and paste; a little oil is also added to give it a brown colour. It requires to be dried quickly, after which another coat of oil is given. The redder the colour the more it is esteemed.

In making kinsatsu, or bank-note paper, 25 lbs. of bark are mixed with twelve pints of a concoction of fine gravel and water, after which 2½ pints of rice starch are added. The kinsatsu paper generally consists of three layers of paper, and 9 pints of nibè or powdered wheat-husks are also mixed with the pulp to give more substance to the paper.

It is then pressed between two planks. When dry it is submitted to the friction of two oak planks, which gives it a glossy appearance.

Generally, the thickness of paper is owing to the number of immersions into the trough containing the pulp; they average from one to four times, and three are required for Kinsatsu paper.

The water-mark in this paper is made by placing an impression of the mark upon the required spot during the second immersion.

Nos. 62 to 66 inclusive bear a great resemblance to crape; they are made by pressing the paper when damp between two planks in which the necessary pattern has been cut. This paper crape is used by women of the poorer classes in ornamenting the back of their head.

(Signed) JAMES J. ENSLIE.

British Consulate, Osaka, September 1870.

Inclosure 8.

LIST of Samples of Paper, together with Use and Wholesale Price of same; taking dollars at 4:20 bus and 4s. 6d.

No.	Name.	Use.	Amount.	Price.
1	Goyōshi	By the Government for despatches ..	Sheets. 12,000	£ s. d. £ s. d. 3 16 1½ to 4 0 4½
2	Hōshō	Ditto	In boxes, 3 inches deep	0 12 9 —
3	Séichō	Ditto	4,000	2 6 9 to 2 11 0
4	Tōshi	For specimens of penmanship ..	190	0 6 4½ to 0 12 9
5	Takinaga	In cookshops; also by women in dress- ing the hair	4,000	1 5 6 to 1 9 9
6	Uda	For account books	2,000	0 6 4½ to 0 7 5½
7	Otake	By Kugés (court officials, &c.) ..	240	2 15 3 to 3 16 6
8	Danshi	Ditto	24	0 3 2½ —
9	Nishino uchi	By the Government	400	0 8 6 —
10	Santomé	Ditto	100	0 4 0 —
11	Katōri	Ditto	8,000	0 12 9 to 0 17 0
12	Hiro ori	For Saké (wine) shop account books ..	4,000	0 6 4½ to 0 7 5½
13	Sukihara	For packing up presents	480	0 5 3½ —
14	Kosugi	By men, as pocket handkerchiefs or for taking notes; to be found in their pocket-books	2,000	0 3 2½ to 0 4 3
15	Senka	For sweetmeat bags and covers of books	1,000	0 9 6½ to 0 10 7½
16	Kobōshō	Similar to Hōshō	500	0 13 9½ —
17	Minogami	For papering slides and lamps; also for light network under garment, used in summer	2,000	1 14 0 to 1 18 3
18	Morokuchi	Similar to Minogami	600	0 6 4½ to 0 7 5½
19	Hanshi	For various purposes	12,000	3 0 0 to 3 4 3
20	Chirigami	Ditto, particularly for daily require- ments	12,000	2 5 6 to 2 9 9
21	Obanshi	For sweetmeat and cake bags	8,000	0 8 6 to 0 12 9
22	Houhan	Ditto	1,000	0 5 3½ —
23	Hankiri	For letter writing	10,000	0 6 4½ to 0 7 5½
24	Phindsuki	Inferior paper, used for first coat in papering walls	600	0 3 2½ to 0 4 3
25	Gédsuki	Ditto	700	0 5 3½ —
26	Kasagami	For papering umbrellas	800	0 4 3 to 0 10 7½
27	Atsugami	Ditto	480	0 4 3 —
28	Iro hankiri	By women, for letter writing	10,000	0 9 6½ to 0 10 7½
29	Yakutaishi	For packing up medicine	270	0 2 1½ to 0 4 3
30	Mmènokibanshi	Similar to Hanshi (No. 19)	2,000	0 3 1½ to 0 3 7½
31	Sennenshi	For papering walls	100	0 5 4½ to 0 8 6
32	Ochiri	For bags for cheap sweetmeats sold in the streets	1 lb. av.	0 5 3½ to 0 6 4½
33	Mani-ai	For papering walls, upon which draw- ings and paintings are afterwards executed	100	0 1 6½ to 0 4 3
34	Usuyō	For ornamental writing	480	0 3 3 to 0 5 3½
35	Chinori chiri	Similar to Chirigama	2,000	0 2 1½ to 0 4 3
36	Onaoshi	For papering sliding-doors of family shrines	480	0 6 4½ to 0 8 6
37	Tengujō	Ditto	450	0 4 9 to 0 6 4½
38	Karagami	For papering walls, lower layer	10,000	0 12 9 to 0 17 0
39	Karagami	Ditto	10,000	0 13 2 to 0 19 0
40	Fukurogami	For packing purposes and cake bags ..	600	0 4 3 to 0 12 9
41	Shibori (A, B, and C)	For making pocket-books, tobacco pouches, &c.	1	0 0 3½ —
42	Yuton	For covering and preserving floor mats	6 by 3 feet	0 1 0 —
43	Yoshino gami	For covering lamps	100	0 5 4½ to 0 8 6
44	Yoshino sugi	Ditto	480	0 4 3 to 0 10 7½
45	Aburagami	For waterproof coats, packing pur- poses, hats, &c.	100	0 5 9½ —
46	Konshi (katamèn)	For papering inside of boxes	600	0 10 7½ to 0 14 10½
47	Ditto (riomen)	Ditto	600	1 1 3 to 2 2 9
48	Kingami	Covering screens, walls, &c.	100	0 1 9½ to 0 2 7½
49	Gingami	Ditto	100	0 1 6½ to 0 2 1½
50	Irogami	For lining boxes, &c.	2,000	0 5 3½ to 0 10 7½*
51	Iro mani-ai	For papering walls	100	0 1 6½ to 0 14 10½†
52	Dosa	For papering the inside of boxes, &c. ..	240	0 1 6½ to 0 3 2½
53	Kidōshi	Ditto	100	0 5 9½ —

* Green being most expensive, yellow the cheapest.

† Grey-yellow being most expensive, and yellow cheapest.

No.	Name.	Use.	Amount.	Price.
54	Sorabeni hankiri ..	By women, for letter writing, &c. . . . For lining boxes; also used as marks for the difficult or unknown charac- ters Japanese sometimes meet with in reading their books	Sheets. 1,000	£ s. d. 0 7 5½
55	Nimai tsugi sudoshi ..		100	0 3 2½
56	Chomen omote gami ..	For covers of account books. . .	100	0 18 3¾
57	Murasaki gami (1)		100	0 0 10¾
	Ginshibo (2)		100	0 1 11¾
	Ditto (3)		100	0 1 11¾
	Kinshibo (4)		100	0 2 5
			Pieces.	
58	Wagaké ..	By women, in ornamenting and dress- ing the hair	100	0 1 5¾
59	Hongin migaké (1)		100	0 8 1½
	Daijin shakunaga (2)		100	0 0 10
	Shô " (3)		100	0 0 5½
	Shakunaga ginshibo (4)		100	0 1 11¾
	Okin shakunaga (5)		100	0 1 11¾
	Chiu " (6)		100	0 0 10½
	Shôgin " (7)		100	0 0 5½
60	Gin midsubik (1)		100	0 0 5½
	Chiu kinawa (2)		100	0 7 10
	Dai " (3)		100	0 8 4
	Gin taki " (4)		100	0 1 11¾
	Aka taki (5)		100	0 1 11¾
	Sô gin (6)		100	0 2 2½
	Shô kinawa (7)	100	0 0 5½	
61	Murasaki kin (1)	Ditto; also for fastening up presents ..	100	0 0 10
	Rin midsubiki (2)	Ditto; ditto	100	0 2 11
62	Riogu-ku kanoko ..		100	0 4 4½
63	Ranoko (A)		100	0 2 2½
	Ditto (B)		100	0 2 0
	Ditto (C)		100	0 1 10½
64	Ranoko (inferior) ..		100	0 1 3
65	Sugikuganoko ..		100	0 1 1
66	Rogata ganoko ..		100	0 0 10
67	Nishi hiki himo ..	For ornamenting the hair ..	100	0 1 3
68	Taki ..		100	0 1 8
69	Ditto ..		100	0 1 1
70	Ditto ..		100	0 0 10
71	Tshi datami kakémono		100	0 2 4
72	Warabi "		100	0 2 7
73	Itonawa "		100	0 3 4
74	Itonawa kakimono (su- perior).		100	0 5 4
75	Benni midsubiki ..		100	0 0 7
76	Tô benni ginmaki ..	Ditto; also for fastening up presents. .	100	0 0 3½
77	Konjo "		100	0 0 3½
78	Shiro "		100	0 0 3½
79	Shiro shakunaga ..		10	0 0 1
80	Gobu "	For ornamenting the hair ..	10	0 0 2
81	Ison "		15	0 0 0¾
82	Is-on gobu "		15	0 0 1½
83	Moto yûi (white) (A)	For fastening the hair while dressing it	100	0 0 5½ to 0 0 7¾
	Ditto (black) (B)		100	0 0 4½
	Nemaki motoyui (C)		100	0 1 2½
		(A, B, and C are only used by women; A, the thicker, by men.)		
84	Noshi ..	For packing up presents ..	100	0 1 6 to 0 5 0
85	Chiyogami ..		100	0 5 0
86	Kinsatsu ire ..	For inserting paper money ..	100	0 1 2 to 0 2 4
87	Midsubiki ..	For fastening up presents ..	100	0 0 7 to 0 2 5
88	Nayaganriki ..	For papering walls and slides	1 sheet	0 0 6
89	Specimens of kinsatsu paper			

Duplicate book of wall-paper not obtainable.

(Signed)

JAMES J. ENSLIE.

Inclosure 9.

LIST of Samples of the various kinds of Paper Manufactured in Japan, with Prices, taking the dollar at 4s. 6d.

Series A.

The papers in this series marked 1 to 39 include all sorts which are used for the various purposes which paper is made to serve, such as writing, printing, packing, papering walls, doors, screens, &c.; for making articles of clothing, such as hats, overcoats, pocket-handkerchiefs, &c., and for umbrellas, parasols, toys, boxes, &c.

All these sorts are imported into Yedo from the different provinces named in the List.

(Of many sorts there are three qualities—superior, middling, and inferior, marked respectively 1, 2, 3.)

No. of Sample.	Name.	Quality or Colour.	Province.	Price per number of Sheets.		Sheets.
				s.	d.	
1	Hosokawagami	{ 1		0	6 $\frac{3}{4}$	48
		{ 2		0	5 $\frac{3}{4}$	"
		{ 3		0	5 $\frac{1}{4}$	"
2	Konishigami	{ 1		0	3 $\frac{1}{4}$	"
		{ 2		0	2 $\frac{3}{4}$	"
		{ 3		0	2	"
3	Chichibu Kobanshi	{ 1		0	0 $\frac{1}{2}$	20
		{ 2		0	0 $\frac{3}{8}$	"
		{ 3		0	0 $\frac{3}{8}$	"
4	Sanlomeban	{ 1		0	8 $\frac{3}{4}$	26
		{ 2		0	7	"
		{ 3		0	5 $\frac{1}{4}$	"
5	Yamato Chirigami	{ 1		0	4 $\frac{1}{4}$	60
		{ 2		0	2 $\frac{1}{2}$	"
		{ 3		0	1 $\frac{3}{4}$	"
6	Yama Udagami			0	10	"
7	Ohadagami			0	4 $\frac{1}{4}$	48
8	Ji-sukigayeshi	{ 1		0	2	96
		{ 2		0	1 $\frac{1}{2}$	"
9	Shirahogami	{ 1		0	2	"
		{ 2		0	1 $\frac{1}{2}$	"
10	Shirahogami Nedzumiban	{ 1	Mushashi ..	0	2 $\frac{2}{3}$	"
		{ 2		0	2	"
11	Shiraho Hankiregami	{ 1		0	1 $\frac{3}{4}$	"
		{ 2		0	1 $\frac{1}{4}$	"
		{ 1, white		0	7 $\frac{3}{4}$	"
12	Shiraho Sendaigami	{ 2, light green		"	"	"
		{ 3, yellow		"	"	"
		{ 4, grey		"	"	"
		{ 5, red		"	"	"
		{ 6, green		"	"	"
		{ 7, dark green		"	"	"
		{ 1		0	0 $\frac{1}{2}$	1
13	Shiraho Harikogami	{ 2		0	0 $\frac{1}{2}$	"
		{ 3		0	0 $\frac{1}{2}$	"
		{ 1		0	4 $\frac{1}{8}$	48
14	Shiraho Hiroban	{ 2		0	4	"
15	Wasei Zōshi	{ 2		8	1 $\frac{1}{4}$	185
16	Wasei Gasenshi	{ 2		0	2	1
17	Taiheishi	{ 1		0	3 $\frac{3}{8}$	"
		{ 2		0	3 $\frac{1}{8}$	"
		{ 3		0	2 $\frac{3}{8}$	"
18	Wasei Toshi Hankiri			0	2 $\frac{3}{8}$	48
19	Hikomagami			0	4	"
20	Urabanshi	{ 1	Shimotsuke ..	2	1 $\frac{1}{2}$	26
		{ 2		1	11 $\frac{1}{2}$	"
21	Hodomura Kami	{ 1		1	8 $\frac{1}{4}$	"
		{ 2		0	7 $\frac{1}{2}$	"
		{ 3		0	7 $\frac{1}{2}$	"
22	Nishi-no-Uchigami	{ 1		1	1	40
		{ 2		0	10 $\frac{1}{3}$	"
23	Inmonjigami	{ 3	Hitachi ..	0	7 $\frac{3}{8}$	"
		{ 1		1	5 $\frac{1}{2}$	34
24	Santomeban	{ 2		1	0 $\frac{1}{8}$	26
		{ 1		0	11	"
25	Hassungami	{ large		0	9 $\frac{1}{3}$	48
26	Otakashi	{ small		0	7 $\frac{3}{8}$	"
		{		1	3 $\frac{1}{6}$	26

No. o Sample.	Name.	Quality or Colour.	Province.	Price per number of Sheets.		Sheets.
				s.	d.	
27	Iwaki Nobegami	1 ..	Ohsiu	0	1 $\frac{5}{8}$	20
		2 ..		0	1 $\frac{3}{4}$	"
		3 ..		0	1 $\frac{1}{4}$	"
28	Saraschigami	1 ..	Shinshiu	0	8 $\frac{1}{8}$	48
		2 ..		0	7 $\frac{3}{8}$	"
		3 ..		0	6 $\frac{3}{8}$	"
29	Homban	1 ..	Ohsiu	0	4 $\frac{1}{4}$	"
		2 ..		0	3	"
		3 ..		0	1 $\frac{7}{8}$	"
30	Nagajaku Hankirishi	1 ..	Koshiu	0	4	96
		2 ..		0	3 $\frac{3}{8}$	"
		3 ..		0	3 $\frac{1}{8}$	"
31	Hankirishi	1 ..	Ohsiu	0	4 $\frac{1}{8}$	"
		2 ..		0	3 $\frac{1}{4}$	"
		3 ..		0	3 $\frac{1}{4}$	"
32	Kobanshi	1 ..	Ohsiu	0	0 $\frac{4}{10}$	"
		2 ..		0	0 $\frac{3}{10}$	"
		3 ..		0	0 $\frac{3}{10}$	"
33	Hanshi	1 ..	Ohsiu	0	0 $\frac{1}{5}$	20
		2 ..		0	0 $\frac{1}{5}$	"
		3 ..		0	0 $\frac{3}{10}$	"
34	Kobanshi	1 ..	Ohsiu	0	0 $\frac{2}{5}$	"
		2 ..		0	0 $\frac{2}{5}$	"
		3 ..		0	0 $\frac{1}{5}$	"
35	Hankiri	1 ..	Ohsiu	0	3	96
		2 ..		0	2 $\frac{1}{2}$	"
		3 ..		0	2	"
36	Iro Hankereshi	1, light green	Suruga	0	0	"
		2, orange		0	1 $\frac{5}{8}$	"
		3, yellow		0	1 $\frac{1}{4}$	"
		4, grey		0	1 $\frac{3}{8}$	"
37	Homban	1 ..	Ohsiu	0	3 $\frac{1}{8}$	48
		2 ..		0	3	"
		3 ..		0	2 $\frac{1}{4}$	"
38	Atsugami	1 ..	Ohsiu	0	7 $\frac{1}{4}$	"
		2 ..		0	0 $\frac{3}{10}$	20
		3 ..		0	0 $\frac{7}{10}$	"
39	Chirigami	1 ..	Mino	0	7 $\frac{1}{8}$	48
		2 ..		0	6	"
		3 ..		0	3 $\frac{1}{2}$	"
40	Shojigami	1 ..	Mino	0	4	"
		2 ..		0	3 $\frac{1}{3}$	"
		3 ..		0	2 $\frac{1}{3}$	"
41	Usushojigami	1 ..	Mino	0	4	"
		2 ..		0	3 $\frac{1}{3}$	"
		3 ..		0	2 $\frac{1}{4}$	"
42	Tengujo	1 ..	Mino	0	6	"
		2 ..		0	11 $\frac{1}{4}$	"
		3 ..		0	7 $\frac{3}{8}$	"
43	Oshomotsugami	1 ..	Mino	0	9 $\frac{1}{8}$	"
		2 ..		0	1 $\frac{1}{2}$	"
		3 ..		0	1 $\frac{3}{5}$	"
44	Kogikugami	1 ..	Mino	0	1	"
		2 ..		0	1 $\frac{3}{5}$	"
		3 ..		0	1	"
45	Kogikugami	1 ..	Mino	1	6	"
46	Hoshoban Gampishi	1 ..	Mino	0	6 $\frac{1}{4}$	"
47	Nishimouchiban Gampishi	1 ..	Mino	0	3 $\frac{1}{4}$	"
48	Shojiban Gampishi	1 ..	Mino	0	2 $\frac{1}{4}$	"
49	Hanshiban Gampishi	1 ..	Mino	0	2 $\frac{1}{4}$	"
50	Kogishuban Gampishi	1 ..	Mino	0	5 $\frac{1}{4}$	"
51	Ousuyoshi	1 ..	Made in various Provinces	0	5 $\frac{1}{4}$	"
52	Chin Uusuyoshi	1 ..	Made in various Provinces	0	3 $\frac{1}{4}$	"
53	Makinakagama	1 ..	Made in various Provinces	0	1 $\frac{1}{4}$	"
54	Itabari Chirigami	1 ..	Mino	0	0 $\frac{1}{4}$	20
55	Otake Danshiji	1 ..	Mino	8	3 $\frac{1}{2}$	24
56	Chintaka Danshi	1 ..	Mino	5	7	"
57	Kotaka Danshi	1 ..	Mino	2	1 $\frac{3}{4}$	"
58	Obiro Hoshoshi	1 ..	Mino	10	4 $\frac{1}{2}$	48
59	Chinhiro Hoshoshi	1 ..	Mino	6	10	"
60	Gobuhiro Hoshoshi	1 ..	Mino	5	6 $\frac{1}{2}$	"
61	Ohoshoshi	1 ..	Mino	4	6	"
62	Chinoshoshi	1 ..	Mino	3	1 $\frac{1}{4}$	"
63	Kohoshoshi	1 ..	Mino	2	3	"
64	Otake Nagagami	1 ..	Mino	6	8 $\frac{1}{4}$	50
65	Gosho Kangami	1 ..	Mino	2	8 $\frac{3}{8}$	1
66	Unshi	1 ..	Mino	0	0 $\frac{3}{4}$	"
67	Yoshino	large	Yamato	0	0 $\frac{1}{4}$	10
		small		0	0 $\frac{2}{3}$	"
68	Osuchiu	1 ..	Ohsiu	0	1 $\frac{1}{2}$	20

No. of Sample.	Name.	Quality or Colour.	Province.	Price per number of Sheets.		Sheets.
				s.	d.	
69	Iōkisque Omaniagami .. ..	.. ..	Setsu	11	3	100
70	Iōkisque Maniaigami .. ..	.. ..		7	9	"
71	Shiro Maniaigami .. ..	.. ..		5	8	"
72	Iro Maniaigami	1, light blue ..		5	4 $\frac{1}{2}$	"
		2, green ..		4	6	"
		3, yellow ..		4	1	"
		4, light yellow ..		4	1	"
		5, brown ..		4	1	"
		6, grey ..		4	1	"
73	Yaku Tashi	1		0	6 $\frac{3}{4}$	24
		2	0	5 $\frac{1}{4}$	"	
74	Iro Tosagami	1, dark blue ..	0	4	"	
		2, blue ..	0	3	"	
		3, light green ..	0	3 $\frac{1}{2}$	"	
75	Momijibukurogami .. ..	.. ..	0	7 $\frac{1}{4}$	12	
76	Chinyoshi .. ..	.. ..	2	5 $\frac{3}{8}$	50	
77	Houzome Udagami .. ..	.. ..	3	4 $\frac{1}{2}$	60	
78	Hashizome Udagami .. ..	.. ..	4	6 $\frac{1}{4}$	"	
79	Katamen Udagami .. ..	.. ..	1	5 $\frac{1}{4}$	"	
80	Hanaire Udagami .. ..	.. ..	1	6 $\frac{5}{8}$	"	
81	Shiu Udagami .. ..	.. ..	3	11 $\frac{1}{4}$	100	
82	Moyegi Senkashi .. ..	.. ..	1	8	60	
83	Akabudakagami .. ..	.. ..	0	3	40	
84	Asbudakagami .. ..	.. ..	0	2 $\frac{1}{2}$	"	
85	Akagami .. ..	.. ..	0	1 $\frac{1}{4}$	"	
86	Aogami .. ..	.. ..	0	2	"	
87	Kigami .. ..	.. ..	0	1 $\frac{3}{8}$	"	
88	Moyegigami .. ..	.. ..	0	2 $\frac{1}{2}$	"	
89	Sukikomi	1	Harima	0	3	48
		2		0	2 $\frac{1}{2}$	"
90	Susaki-banshi	1		0	1	20
		2		0	0 $\frac{1}{4}$	"
		3		0	0 $\frac{3}{8}$	"
91	Kataoko-banshi	1		0	1 $\frac{1}{10}$	"
		2		0	1	"
		3		0	0 $\frac{3}{10}$	"
92	Obanshi	1		0	1 $\frac{1}{2}$	"
		2		0	1 $\frac{2}{3}$	"
		3	0	1 $\frac{1}{3}$	"	
93	Kosugi-harashi	1	0	0 $\frac{3}{8}$	"	
		2	0	0 $\frac{1}{2}$	"	
94	Hannunogami	1	Tosa	0	4 $\frac{1}{2}$	100
		2		0	6 $\frac{1}{2}$	48
95	Seicho	1		0	4 $\frac{3}{8}$	"
		2		0	4 $\frac{1}{8}$	"
96	Osugiharashi	1		0	7 $\frac{1}{4}$	"
		2		0	6 $\frac{1}{4}$	"
		3		0	6 $\frac{1}{2}$	"
97	Atsugami	1		0	6 $\frac{1}{2}$	"
		2		0	6 $\frac{1}{4}$	"
		3		0	5 $\frac{1}{2}$	"
98	Okuragami .. ..	.. ..	0	4 $\frac{3}{8}$	"	
99	Senkashi .. ..	.. ..	0	3 $\frac{3}{8}$	"	
100	Chirugami .. ..	.. ..	0	10 $\frac{1}{4}$	50	
101	Odzabanshi	1	0	0 $\frac{1}{2}$	20	
		2	0	0 $\frac{1}{4}$	"	
		3	0	0 $\frac{3}{8}$	"	
102	Odzuchirigami	1	0	0 $\frac{1}{2}$	"	
		2	0	0 $\frac{1}{4}$	"	
		3	0	0 $\frac{1}{2}$	"	
103	Odzu Senkashi	1	1	1 $\frac{1}{4}$	60	
		2	1	0 $\frac{1}{4}$	"	
104	Nanatome Senkashi .. ..	.. ..	1	1	"	
105	Uwajuma Senkashi	1	Iyo	1	0 $\frac{1}{2}$	"
		2		1	0 $\frac{1}{4}$	"
106	Uwajima Chirigami	1		0	11	"
		2		0	2	48
107	Oboschoahi	1		1	2 $\frac{1}{4}$	"
		2		1	0 $\frac{3}{4}$	"
		3		1	0	"
108	Koboshoshi	1		0	9 $\frac{1}{4}$	"
		2		0	8 $\frac{1}{4}$	"
		3		0	7 $\frac{1}{2}$	"

No. of Sample.	Name.	Quality or Colour.	Province.	Price per number of Sheets.		
				s.	d.	
109	Takenagagami ..	1 ..	Iyo ..	2	11½	50
		2 ..		2	0¾	"
		3 ..		1	10½	"
110	Houkuchi Hoshoshi ..	1 ..	Iyo ..	1	0½	48
		2 ..		0	11½	"
111	Karakasagami ..	..	Awa ..	0	6	"
112	Heichinchirigami ..	..		4	1½	50
113	Takenagagami ..	1 ..	Awa ..	3	9	"
114	Goshiki Gampishi ..	2 ..		0	5½	5
115	Hamada-banshi ..	1 ..	Iwami ..	0	0¾	20
116	Yoshiga-banshi ..	2 ..		0	0¾	"
		3 ..		0	0¾	"
117	Takutsu-banshi ..	2 ..	Aki ..	0	0¾	"
118	Hiroshima-banshi ..	2 ..		0	0¾	"
119	Hiroshima Chirigami ..	3 ..	Hizen ..	0	0¾	"
120	Karatsu-banshi ..	1 ..		0	0¾	"
		2 ..		0	0¾	"
121	Karatsu Chirigami ..	3 ..	Hizen ..	0	0¾	"
122	Hankireshi ..	1 ..		0	0¾	"
		2 ..		1	7¾	100
123	Nobeoka-banshi ..	3 ..	Hinga ..	0	9¾	"
		2 ..		0	7¾	"
		3 ..		0	0¾	20
124	Hankireshi ..	1 ..	Chikugo	0	0¾	"
		2 ..		0	5½	100
		3 ..		0	4¾	"
125	Sennenshi ..	1 ..	Chikugo	4	11½	50
126	Sabekibanshi ..	2 ..		4	4	"
127	Usukibanshi ..	3 ..	Bungo	0	0¾	20
128	Bungobanshi ..	1 ..		0	0¾	"
		3 ..		0	0¾	"
129	Bungo Hankireshi ..	2 ..	Bungo	0	0¾	"
		1 ..		0	7¾	100
130	Iwakunibanshi ..	2 ..	Bungo	0	6¾	"
		1 ..		0	1¾	20
		3 ..		0	1	"
131	Tokuceibansho ..	1 ..	Suwo ..	0	0¾	"
		2 ..		0	0¾	"
132	Samabanshi ..	1 ..	Suwo ..	0	0¾	"
		2 ..		0	0¾	"
		3 ..		0	0¾	"
133	Kanobanshi ..	1 ..	Suwo ..	0	0¾	"
		2 ..		0	0¾	"
134	Hanaokabanshi ..	1 ..	Suwo ..	0	0¾	"
135	Mitajirubanshi ..	2 ..		0	0¾	"
		3 ..		0	0¾	"
136	Gokamurabanshi ..	1 ..	Suwo ..	0	0¾	"
		2 ..		0	0¾	"
		3 ..		0	0¾	"
137	Yamashirobanshi ..	1 ..	Suwo ..	0	0¾	"
		2 ..		0	0¾	"
138	Yamashiro Chirigami ..	3 ..	Suwo ..	0	0¾	"
		2 ..		0	0¾	"
139	Hiro-origami ..	3 ..	Suwo ..	0	0¾	"

Series B.

The papers in this series are prepared in Yedo from the appropriate kinds in Series A.

PAPERS for Bookbinding, prepared by the Firm of Maruya, and marked M.

No. of Sample.	Name.	Price per Sheet.
		s. d.
1	Oban Mombiyoshi	0 0 $\frac{7}{10}$
2	Minoban Mombiyoshi	0 0 $\frac{3}{5}$
3	Hanshiban Mombiyoshi	0 0 $\frac{1}{5}$
4	Minoban Mujihiyoshi	0 0 $\frac{3}{5}$
5	Hanshiban Mujihiyoshi	0 0 $\frac{2}{5}$
6	Shuzome Hiyoshi	0 0 $\frac{1}{5}$
7	Kouzome Hiyoshi	0 0 $\frac{3}{5}$

Oil-soaked Papers, Imitation Leathers, &c., prepared by Takeya, and marked T; used largely for making boxes, purses, pocket-books, tobacco-pouches, &c.

1	Kurokazaorimomi	0 3 $\frac{1}{2}$
2	Kurusugimomi	0 3 $\frac{1}{2}$
3	Kobichamomi	0 3 $\frac{1}{2}$
4	Yeburimomi	0 3 $\frac{1}{2}$
5	Kuroyanagimomi	0 3 $\frac{1}{2}$
6	Uguisuchagami	0 3 $\frac{1}{2}$
7	Chakazaori	0 3 $\frac{1}{2}$
8	Aomomi	0 3 $\frac{1}{2}$
9	Kindanmoyo	0 4 $\frac{1}{2}$
10	Kinjirinassi-moyo	0 4 $\frac{1}{2}$
11	Ninjindekin	0 4 $\frac{1}{2}$
12	Ginjufurifuri-moyo	0 4 $\frac{1}{2}$
13	Kiuji Takasago	0 4 $\frac{1}{2}$
14	Sabi Tenjinde	0 4 $\frac{1}{2}$
15	Kin Tenjinde	0 4 $\frac{1}{2}$
16	Kaori Yanagimomi	0 5 $\frac{1}{2}$
17	Gokuatsu Kadrigami	0 6 $\frac{1}{2}$
18	Kintabisugawa	0 7 $\frac{1}{2}$
19	Kinsugawa	0 7 $\frac{1}{2}$
20	Shimofuri Sugawa	0 9
21	Aburanashi Shiagekata Shitajigami	0 2 $\frac{1}{2}$
22	Yogan Kodaimoyo	2 6 $\frac{1}{2}$
23	Yogan Suichin Nokoye	
24	Yogan Tadzunazome	1 10 $\frac{1}{2}$
25	Beni Yogan	1 4 $\frac{1}{2}$
26	Yogan Tsugaru	1 3 $\frac{1}{2}$
27	Yogan Tsugarudake	1 3 $\frac{1}{2}$
28	Shuyogan	1 3 $\frac{1}{2}$
29	Kimomi Yogan	1 3 $\frac{1}{2}$
30	Aomomi Yogan	1 3 $\frac{1}{2}$
31	Yogan Mokume	1 2 $\frac{1}{2}$
32	Aoyogan	1 2 $\frac{1}{2}$
33	Kiyogan	1 2 $\frac{1}{2}$

Oil-damped Papers, Imitation Leather, &c., prepared by Okuraya, and marked O; used by the upper classes in the various modes of room-decoration, as wall-papers, screens, panelling, covering boxes, &c.

1	Otake Kurowsukuchi	0 0 $\frac{4}{5}$
2	" " " "	0 0 $\frac{4}{5}$
3	" " " (middle size)	0 1 $\frac{1}{5}$
4	" Aousukuchi	0 0 $\frac{9}{10}$
5	" Kurirochiu	0 1 $\frac{3}{10}$
6	" Kikkogata	0 1 $\frac{3}{10}$
7	" Kurochinatsu	0 1 $\frac{1}{2}$
8	" Ao	0 1 $\frac{1}{2}$
9	" Chairo	0 1 $\frac{1}{2}$
10	" Kuriro	0 1 $\frac{1}{2}$
11	" Kaori	0 1 $\frac{1}{2}$
12	" Sarasagata	0 1 $\frac{1}{2}$
13	" Kaorihiroban	0 2 $\frac{1}{10}$
14	" Kumogataro	0 2 $\frac{1}{10}$
15	" Kuriro	0 2 $\frac{1}{2}$

No. of Samples.	Name.	Price per Sheet.	
		s.	d.
16	Otaka Shobugata Ao	0	2 $\frac{1}{10}$
17	" Tsumegata	0	2 $\frac{1}{10}$
18	" Kuro atsukuchi	0	2 $\frac{1}{2}$
19	" Shiorihiro Mongata	0	2 $\frac{1}{2}$
20	" Kuro gokuatsukuchi	0	2 $\frac{1}{2}$
21	Housho Otaka Kaori arai	0	2 $\frac{1}{2}$
22	" " Kazaori Kuro	0	3 $\frac{1}{2}$
23	" " Kuriiro.	0	3 $\frac{1}{2}$
24	" " Chairo.	0	3 $\frac{1}{2}$
25	" " Yurigata	0	3 $\frac{1}{2}$
26	" " Kouzaisuke	0	3 $\frac{1}{2}$
27	" " Kinji kumogata	0	3 $\frac{1}{2}$
28	" " Yanagi Juyo	0	3 $\frac{1}{2}$
29	" " Karahana	0	3 $\frac{1}{2}$
30	" " Kiritsugi	0	3 $\frac{1}{2}$
31	" " Tadzemagata	0	3 $\frac{1}{2}$
32	" " Isegami Chimban Atsukuchi	0	4 $\frac{1}{2}$
33	" " Hiroban Usukuchi	0	4 $\frac{1}{2}$
34	" " Jomomi Kuro	0	4 $\frac{1}{2}$
35	" " Kuriiro.	0	5 $\frac{1}{2}$
36	" " Chairo.	0	5 $\frac{1}{2}$
37	" " Shuhiroban	0	5 $\frac{1}{2}$
38	" " Kaori	0	7 $\frac{1}{2}$
39	" " Kijitobikiu	1	0
40	" " Isegami Hiroban Ogijigami makiye	1	5 $\frac{1}{2}$
41	" " Tsukiyukihana	1	8 $\frac{1}{2}$
42	" " Ito-ô	1	10 $\frac{1}{2}$
43	" " Matsutaka	1	9 $\frac{1}{2}$
44	" " Shuhiroban Ogijigami Makiye	1	9 $\frac{1}{2}$
45	" " Tsukiyukihana	2	0
46	" " Koi	1	1 $\frac{1}{2}$
47	Yokanji Shuriyomen	0	10 $\frac{1}{2}$
48	" Tatejima	1	1 $\frac{1}{2}$
49	" Saagata	1	1 $\frac{1}{2}$
50	" Kakikinu Kusagata	1	1 $\frac{1}{2}$
51	" Kaori arai Katamen Hiroban	0	9 $\frac{1}{2}$
52	*Aburanashi Momban	0	0 $\frac{1}{4}$

* The same paper as the preceding sorts in its prepared state, before the oil is applied.

PAPERS sold by Kiukwado, and marked K. Fancy Papers used in writing notes, letters of ceremony, congratulations, and other communications exchanged on festive occasions; also for writing poetry, and for sketching and painting, &c.

No. of Sample.	Name.	Description, Colour, &c.	Price per Number of Sheets.			
			s.	d.		
1	Gampishi	Middle sized hosho, 5 colours.	2	3 $\frac{1}{2}$	100	
	" Hankire	5 colours.	1	0 $\frac{1}{2}$	100	
	" Usudezuki. .. .. .	.. .. .	0	5 $\frac{1}{2}$	100
	" Hankire	8 colours; sprinkled with light seaweed, &c.	0	4 $\frac{1}{2}$	100	
2	Hosho Yebankire.	With stained designs	4	10 $\frac{1}{2}$	100	
3	Yôbôsho Yebankire	Stained designs; superior	2	7 $\frac{1}{2}$	100	
		" inferior	1	4 $\frac{1}{2}$	100	
		" 1st quality	2	10 $\frac{1}{2}$	100	
4	Gampishi Yebankiri	" 2nd	1	7 $\frac{1}{2}$	100	
		" 3rd	0	6 $\frac{1}{2}$	100	
		"	0	7 $\frac{1}{2}$	45	
5	Iyobosho Nunome.	Grained; light green	0	6	45	
6	" Inamushiro	5 colours	0	2 $\frac{1}{2}$	48	
7	Chojibiki Soruga bankire	Striped	0	2 $\frac{1}{2}$	48	
7	Wadoshi Hankire.	Grey	0	2 $\frac{1}{2}$	48	
		(Hôshô (size) ban	2	1	48	
		Nishi no uchi	1	0 $\frac{1}{2}$	48	
		Chibosho	1	9 $\frac{1}{2}$	48	
		Minogami	0	3 $\frac{1}{2}$	48	
		"	0	3 $\frac{1}{2}$	48	
		"	0	3	48	
		"	1	4 $\frac{1}{2}$	96	
		Gampishi	"	0	3 $\frac{1}{2}$	48
		"	"	0	3	48

[313]

E

No. of Sample.	Name.	Description, Colour, &c.	Price per Number of Sheets.		
			s.	d.	Sheets.
10	Dzushiu Gampishi.	Minogama, 1st quality	0	7 $\frac{1}{2}$	48
		" 2nd	0	4 $\frac{1}{2}$	48
		" 3rd	0	3 $\frac{1}{2}$	48
		Hanshi ban	0	3 $\frac{1}{2}$	48
		White	0	1 $\frac{1}{2}$	1
11	Torinoko	Thick : purple	1	2	1
		" green	0	11	1
12	Gampi Hoshoban	Crimson	0	3 $\frac{1}{2}$	1
		3 colours	0	1 $\frac{1}{2}$	1
		Crimson and purple	0	2 $\frac{1}{2}$	1
		White	0	0 $\frac{3}{4}$	1
13	Iyobosho	Red, green, yellow	0	1	1
		Crimson, tinsel-sprinkled	0	4 $\frac{1}{2}$	1
		White,	0	2	1
		Yellow, green, light green	0	2 $\frac{1}{2}$	1
14	Otaka Danshi	Crimson	0	7 $\frac{1}{2}$	1
		Light green	0	4 $\frac{1}{2}$	1
		Yellow	0	5 $\frac{1}{2}$	1
15	Shikishi	1st quality	7	6	10
		2nd	5	7 $\frac{1}{2}$	10
		3rd	1	0	10
16	Tanzaku	1st quality	5	3	10
		2nd	2	9 $\frac{1}{2}$	10
		3rd	0	1 $\frac{1}{2}$	10
17	Kwaishi	1st quality	4	1	1
		2nd	3	7	1
		3rd	2	8 $\frac{1}{2}$	1
		4th	1	6 $\frac{1}{2}$	1
		5th	0	9 $\frac{1}{2}$	1
18	Esoshi	Flowered	0	1 $\frac{1}{2}$	1
		Pocket-books	0	3 $\frac{1}{2}$	10
19	Iobukuro	" 2nd quality	0	2	10
		" 3rd	0	0 $\frac{3}{10}$	10
		"	0	4 $\frac{1}{2}$	20
20	Shisen Ogata	Tortoiseshell paper	0	2 $\frac{1}{2}$	1
21	Bekkogami	Glass paper	0	2 $\frac{1}{2}$	1
22	Giyozeishi	"	0	1 $\frac{1}{2}$	1
23	Chiyogami	Gokugo (extra superfine)	0	3 $\frac{1}{2}$	1
		Jo (superfine)	0	1 $\frac{1}{2}$	1
		Chiu (middling)	0	1 $\frac{1}{2}$	1
		Ge (worst)	0	0 $\frac{1}{10}$	1
24	Kingoshi Minogami	"	0	9 $\frac{1}{2}$	48
		Hanshiban	0	6 $\frac{1}{2}$	48
25	Dosabiki Minogami	"	0	8 $\frac{1}{2}$	48
		Usuminogami	0	6 $\frac{1}{2}$	48
26	Dosabiki Tenjujo	"	0	7 $\frac{1}{2}$	48
		"	1	4 $\frac{1}{2}$	100
27	Kebikigami Minogamizuri	Hanshizuri	0	5 $\frac{1}{2}$	100
		"	0	10 $\frac{1}{2}$	100
		"	0	9 $\frac{1}{2}$	100
		"	0	0 $\frac{1}{2}$	1
28	Gampishi fusumagami	5 colours	0	0 $\frac{1}{2}$	1
		Maniaban	0	1 $\frac{1}{2}$	1
		Kinsunagoiri	0	4 $\frac{1}{2}$	1
		3rd	0	3 $\frac{1}{2}$	1
		Kirara	0	1	1
29	Maniai fusuinagami Kin no Kataski	Gilt designs	0	9	1
		"	0	4 $\frac{1}{2}$	1
30	" " Kirara no Katazuki	"	0	1 $\frac{1}{2}$	1
		"	0	0 $\frac{3}{10}$	1
31	Tokiyō Jisuke fusamagami	Large size	1	8 $\frac{1}{2}$	1
		Middle size	0	6 $\frac{1}{2}$	1
		Small size	0	5 $\frac{1}{2}$	1
32	Gampishi Ohonhiyoshi	"	0	0 $\frac{1}{2}$	1
		Chuhou hiyoshi	0	0 $\frac{1}{10}$	1
		Kohou hiyoshi	0	0 $\frac{1}{2}$	1