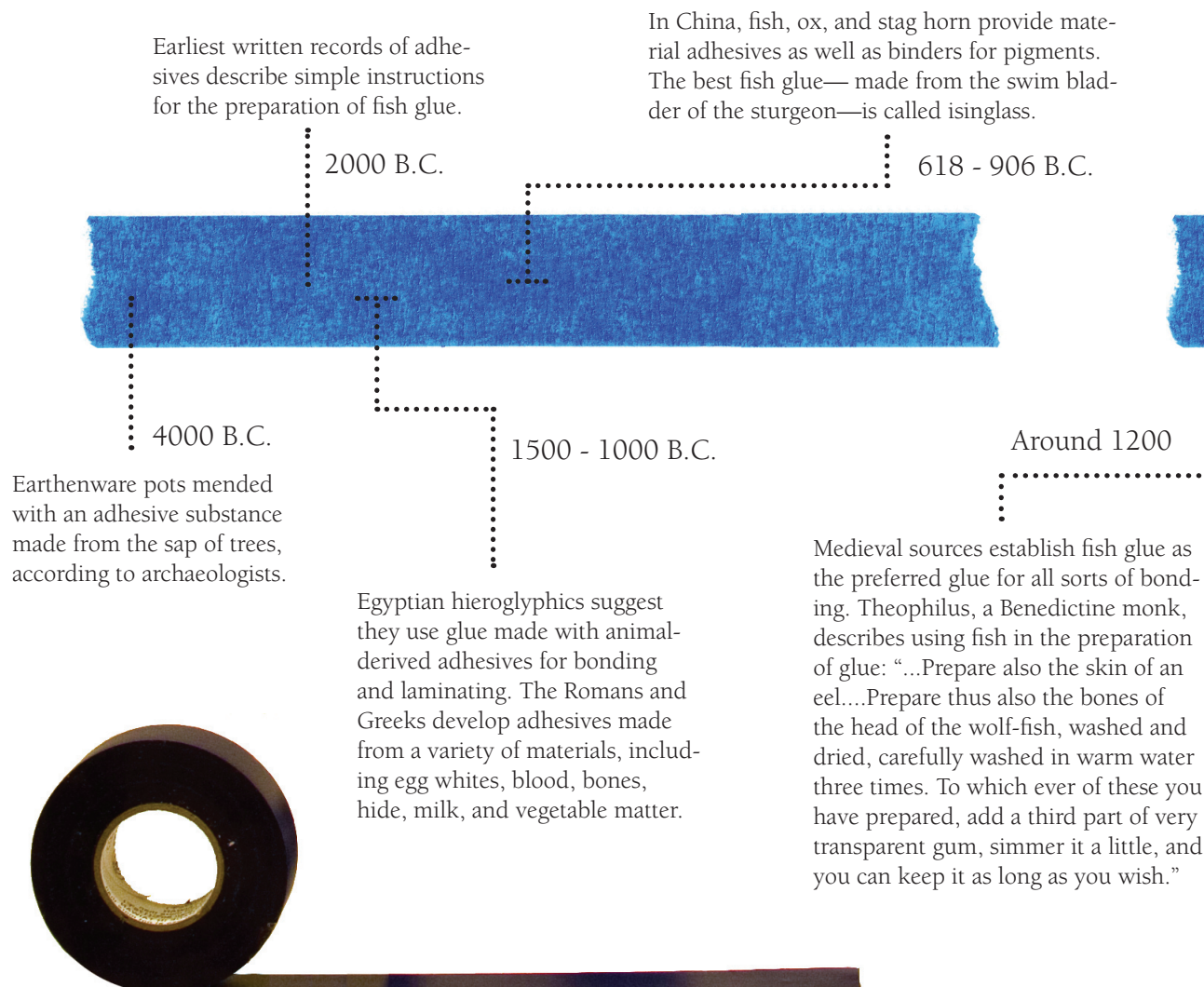


A BRIEF HISTORY OF TAPE

by Jonathan Edelman

It's hard to imagine a world without tape. It mends our precious keepsakes, holds parts together as a quick repair, keeps our wounds together—and sometimes saves lives. The film industry is a virtual slave to tape: gaffer's tape, paper tape, camera tape. Supposedly Socrates used an animal hide with some kind of sap to repair a hole in his home. We at least know that before tape, there was glue, fabric, paper, animal skins, and string; when tape came on the scene, everything changed. This timeline puts into perspective how tape has changed the very nature of adhesion and, along with it, designers' manipulation of the world.



Earle Dickson, a cotton buyer for Johnson and Johnson, invents the Band-Aid. Surgical bandages, like the ones Dr. Day had invented, kept falling off his wife Josephine's busy fingers after cutting them in the kitchen, so Dickson attaches a piece of gauze to some cloth-backed tape and covers it with crinoline. Johnson and Johnson makes Earle a VP for his effort.

The National Science Foundation forms the Center for Polymeric Adhesives and Composites in order to establish a "coherent philosophy and systematic methodology for the creation of new and advanced polymeric adhesives." The mechanics of adhesion is just now beginning to be understood and to date, there's no unified theory of adhesion. Industry relies on rules of thumb in order to develop new adhesives.

First patent for an adhesive issued in Britain for a fish-based glue. Not long after, many patents issued for glues using fish, animal bones, milk, rubber, and starch. The first commercial glue factory in Europe opens in Holland.

Around
1750

Cloth-backed tape now common in industry, including that of the nascent automobile, where it's used to affix paper to cars to mask overspray from the automatic paint gun. To solve the problem of paint bleeding through the gauze used in the tape, Richard Drew—an engineer for the Minnesota Mining and Manufacturing Company (now known as 3M)—invents masking tape, the first use of paper as a pressure-sensitive adhesive backing. A few years later in 1930, he invents a clear cellulose tape called Scotch Brand Cellulose.

1921

1925

1989

Pressure-sensitive tape makes its first appearance. Horace Day, a surgeon, uses a rubber adhesive applied to strips of fabric to make a new invention: surgical tape.

1845

1942

Duct tape is developed by Johnson and Johnson during World War II to meet the need for waterproof tape that could seal canisters and repair equipment. Basically cloth tape coated with polyethylene, duct tape also has superior gripping ability, making it easy to use in the field for emergency repairs.

