

UNITED STATES PATENT OFFICE.

CHARLES E. SAWYER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN COMPOUNDS FOR GLUING PAPER.

Specification forming part of Letters Patent No. **157,934**, dated December 22, 1874; application filed October 28, 1874.

To all whom it may concern:

Be it known that I, CHARLES E. SAWYER, of Boston, in the county of Suffolk and State of Massachusetts, have invented an improved process of cementing or joining together paper, leather, cloth, or other articles with a water-proof compound which is cheap, simple, and durable; and it consists in coating one or both parts of the articles to be joined with glue and tannin, the strength of which may be varied according to the nature of the work.

The coating of glue and tannin, when dry, receives a coat of bichromate of potash; this is then exposed to the light for a short time. When sufficiently acted upon by the light, and while moist, the part or parts thus treated are brought together by pressure, when adhesion takes place, uniting the two parts together very firmly, which joining is perfectly water-proof. In joining paper or leather, or paper to leather, only one part or joint need be treated; or the other part may be only treated with glue and tannin, or glue alone. It is found that if one part is coated with glue and tannin, then with the bichromate of potash, a very strong water-proof joint is formed when pressed upon the part not treated, if done when a sufficient tact remains to cause the parts to stick.

Instead of the coating of glue and tannin, British gum and tannin may be used for the first coat; then a coating of bichromate of potash, applied as before. This will answer if cheapness is more desirable than a perfectly water-proof joining.

This process of joining or uniting two pieces of paper is peculiarly adapted to the manufacture of shipping-tags, for cementing the strengthening-patches to the eyes of the same, so as to withstand moisture, or even soaking in water for days, without being softened or destroyed, making a stronger joint than shellac, heretofore in use for this purpose, and at great reduction in cost.

Having thus described my invention, what I claim is—

The above-described compound for uniting paper, &c., consisting of a coating of glue and tannin, and a second coat of bichromate of potash, substantially as described, and for the purposes specified.

CHAS. E. SAWYER.

Witnesses:

SYLVENUS WALKER,
ROBERT F. NAYLOR.