

UNITED STATES PATENT OFFICE.

WILLIAM ADAMSON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN THE MANUFACTURE OF GLUE.

Specification forming part of Letters Patent No. **157,564**, dated December 8, 1874; application filed September 1, 1874.

CASE B.

To all whom it may concern:

Be it known that I, WM. ADAMSON, of Philadelphia, Pennsylvania, have invented an Improvement in the Manufacture of Glue, of which the following is a specification:

The object of my invention is to facilitate and economize the manufacture of glue of a superior quality by the digesting and expressing operations explained hereafter.

According to the usual process of manufacturing glue, gelatine, or size, the stock is continuously boiled until all the glue is extracted or dissolved from the tissues, such as hair, bone, fiber, &c. This process, on account of its duration and continuously applied heat, and the large amount of water required, deteriorates the gelatine, darkens its color, and impairs its quality; hence I depart from the usual process, and conduct the operation in stages in the following manner.

After the glue-stock has been so far digested that it has assumed a fluid or semi-fluid consistency, I subject the whole mass to a draining or straining process, conducted under pressure—an operation which may be carried into effect in various ways. For instance, the partially-dissolved mass may be placed in a vessel with a perforated or slatted bottom and sides, and the glue separated from the mass by hydraulic or other pressure; or the mass

may be placed in coarse bags, and the gelatinous fluids expressed from them, leaving the undissolved stock to be further digested and pressed, and these operations are repeated as many times as the character of the glue-stock may require.

By thus rapidly and forcibly separating the concentrated glue as it is dissolved from the tissues, the bad effect of the long-continued application of heat on the dissolved or semi-dissolved gelatine is obviated, an increased product is obtained, and this product is of better quality, and, in addition to all this, the glue is more rapidly produced, and in so concentrated a condition as to prevent fermentation. Less room and labor, moreover, are required for conducting the operation, and less time is required for drying the glue.

I claim as my invention—

The process described of mechanically expressing glue, gelatine, or size from partially-dissolved glue-stock, redigesting the latter, and again expressing the glue, all as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM ADAMSON.

Witnesses:

HARRY SMITH,
HUBERT HOWSON.