

UNITED STATES PATENT OFFICE.

LEWIS FRANCIS AND F. W. LETMATE, OF NEW YORK, N. Y.

IMPROVEMENT IN PRINTERS' INK-ROLLERS.

Specification forming part of Letters Patent No. 43,192, dated June 21, 1864.

To all whom it may concern:

Be it known that we, LEWIS FRANCIS and FREDERICK W. LETMATE, of New York, in the county and State of New York, have invented, made, and applied to use a new and useful Composition for the Manufacture of Printers' Inking-Rollers; and we do declare the following to be a full, clear, and correct description of the same, reference being had to the specimens accompanying this application.

The nature of our invention consists in combining glue, glycerine, and molasses to form a composition for the manufacture of printers' inking-rollers.

The following are the ingredients and proportions which we have found to produce a superior article of roller, and which we propose generally to adopt: glycerine, four (4) parts; glue, two (2) parts; molasses, one (1) part.

It is well known to every printer how difficult a matter it is to keep inking-rollers in a proper condition for use for more than three months. The composition of which the rollers are composed, being merely glue and molasses, soon dries up, shrinks, and becomes hard, thereby losing its suction, which renders it unfit for use.

To produce a roller which will not be affected by the changes in the atmosphere or by long use, and be at all times in a suitable condition for instant use, is the object of our invention. This we accomplish, as before stated, by substituting glycerine in part for molasses in the manufacture of rollers. The peculiar nature of the glycerine prevents the composition from becoming dry and hard, and also enables us to produce a harder roller and still have the same amount of suction.

In the manufacture of our improved compo-

sition the glue is first melted in the usual manner, and afterward the glycerine and molasses are added and the whole allowed to boil about twenty minutes, when the composition is in a suitable state for casting into rollers.

The rollers made from our improved composition are more durable, have a better suction, and retain it for years, and can be furnished at a cost not exceeding that of the ordinary roller.

We do not wish to be understood as intending to confine ourselves to the proportions above set forth, as we are well aware these proportions may be varied in many cases, and sometimes advantageously.

We are well aware that Letters Patent were granted Thomas De La Rue for glue and glycerine combined to form a printers' inking-roller; but we are also aware that the process set forth by him in his specification is impracticable and impossible, in that glue cannot be dissolved in glycerine without the aid of some assisting agent, and that if the process set forth by Mr. De La Rue were pursued the result would be entirely different from that claimed by him.

Disclaiming entirely the process described by De La Rue, what we claim as new, and desire to secure by Letters Patent, is—

1. Combining glue and glycerine to form a composition for the manufacture of printers' inking-rollers.

2. Combining glue, glycerine, and molasses for the same purpose.

LEWIS FRANCIS.
FREDK. W. LETMATE.

Witnesses:

JAMES LAIRD,
RICHARDSON GAWLER.