

UNITED STATES PATENT OFFICE.

HENRY M. BOIES, OF SCRANTON, PENNSYLVANIA.

IMPROVEMENT IN PROCESSES FOR MANUFACTURING PAPER TUBING.

Specification forming part of Letters Patent No. **168,365**, dated October 5, 1875; application filed July 10, 1875.

To all whom it may concern:

Be it known that I, HENRY M. BOIES, of Scranton, Pennsylvania, have invented an Improved Process of Manufacturing Paper into Endless Water-Proof Tubing, of which the following is a specification:

My invention relates to a process of manufacturing paper into water-proof endless tubing, for use as cartridge-tubing; and it consists in cutting a web of paper in the roll into strips of the required width, and in pasting one edge of the strip; then folding it longitudinally over a suitable tongue or former, so as to lap the edges one upon the other, and in then pressing the lapped edges together and drying the paste; and, finally, in conducting the tube thus formed through a vat containing a bath of water-proofing material, which dries on exposure to the air, or by the appli-

cation of heat, the result being the production of a continuous water proof tube of paper, which can be subsequently cut into the lengths required for use as cartridge-tubing.

I claim as my invention—

The process of manufacturing water-proof tubing of paper in one continuous operation, herein described, which consists in forming a tube by pasting and lapping the edges of a strip of paper of the required width, then drying the paste, and finally in coating the tube with a water-proof material, substantially as set forth.

Scranton, Pennsylvania, June 23, 1875.

H. M. BOIES.

Witnesses:

JOHN D. SHERER,
L. M. HORTON.