(No Model.)

# G. H. ARTHUR.

## TRANSFER ROLLER.

No. 367,737. Patented Aug. 2, 1887.

*FIG. 1.*

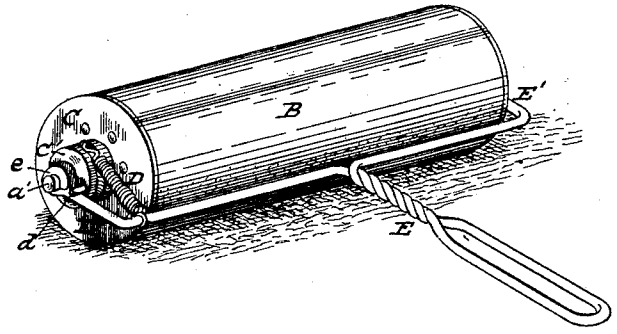
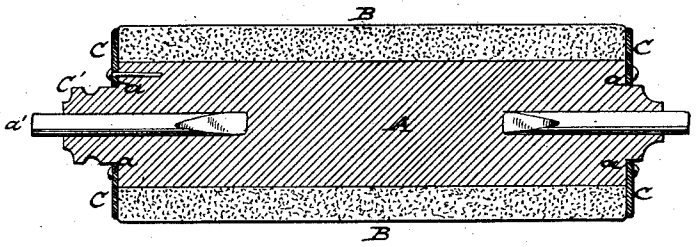



*FIG. 2.*




ATTEST:

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# UNITED STATES PATENT OFFICE.

GEORGE H. ARTHUR, OF CHICAGO, ILLINOIS.

## TRANSFER-ROLLER.

SPECIFICATION forming part of Letters Patent No. 367,737, dated August 2, 1887.

Application filed March 22, 1886. Serial No. 196,153. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. ARTHUR, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Multiplying Transfer-Rollers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification..

The present invention relates to that class of appliances in which a gelatine-composition roller is employed to multiply copies of writings or drawings executed with a suitable ink; and the objects of the present invention are, first, to provide a very cheaply-constructed gelatine-composition roller for such uses; and, second, to provide means for returning the transfer-roller to the proper position or "register," after the same has been operated to make a copy. I attain such objects by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved transfer-roller complete, and Fig. 2 a longitudinal section of the roller proper.

As represented in the drawings, my improved roller consists of a main core, A, of wood or analogous material, around which is cast or otherwise secured the transfer-facing B, of gelatine composition, preferably the composition of gelatine and glycerine usually employed in this class of appliances. The facing B is supported at its ends by means of supporting-disks C, placed on offsets *a* of the core A, as shown, one of said offsets being extended, so as to form a receiving-drum, C', for the coiled or other suitable form of spring, D, by which a return rotation is imparted to the transfer-roller after an impression has been made, so as to bring it automatically back to its proper position or register ready for a repetition of the impression, a stop pin or stud, *d*, being provided on the roller, which engages against one of the side bars, E', of the operating bail or handle E, by which the appliance is manipulated; and such bail or handle may be made of cast or malleable metal, if desired; but it is preferable to make it of wire and twist and bend the same, so as to make the journal-eyes *e* for the roller-gudgeons *a'*, side bars, E', as well as the handle proper, of one piece of wire.

The fixed end of the operating-spring D is secured to the bail or handle E in the manner shown in Fig. 1.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

In a transfer-roller for the purpose herein described, the combination of core A, having a longitudinal extension, C', at one end to form a winding-drum for the operating-spring, and a stop, *d*, the forked operating yoke or bail E, the side bars or forks of which have journal-eyes for the gudgeons *a'* of the roller, and the operating spring D, one end of which is secured to yoke or bail E, and the other end to the drum C' and adapted to wind thereon, essentially as set forth.

In testimony whereof witness my hand this 18th day of March, 1886, at Chicago, Illinois.

GEORGE H. ARTHUR.

In presence of—

ROBERT BURNS,

JNO. R. BRANDON.