

A. S. Davis.

Attaching Engraved Blocks to their Belts.

N^o 2771.

Patented Nov. 26. 1861.

33 775

Fig. 1.

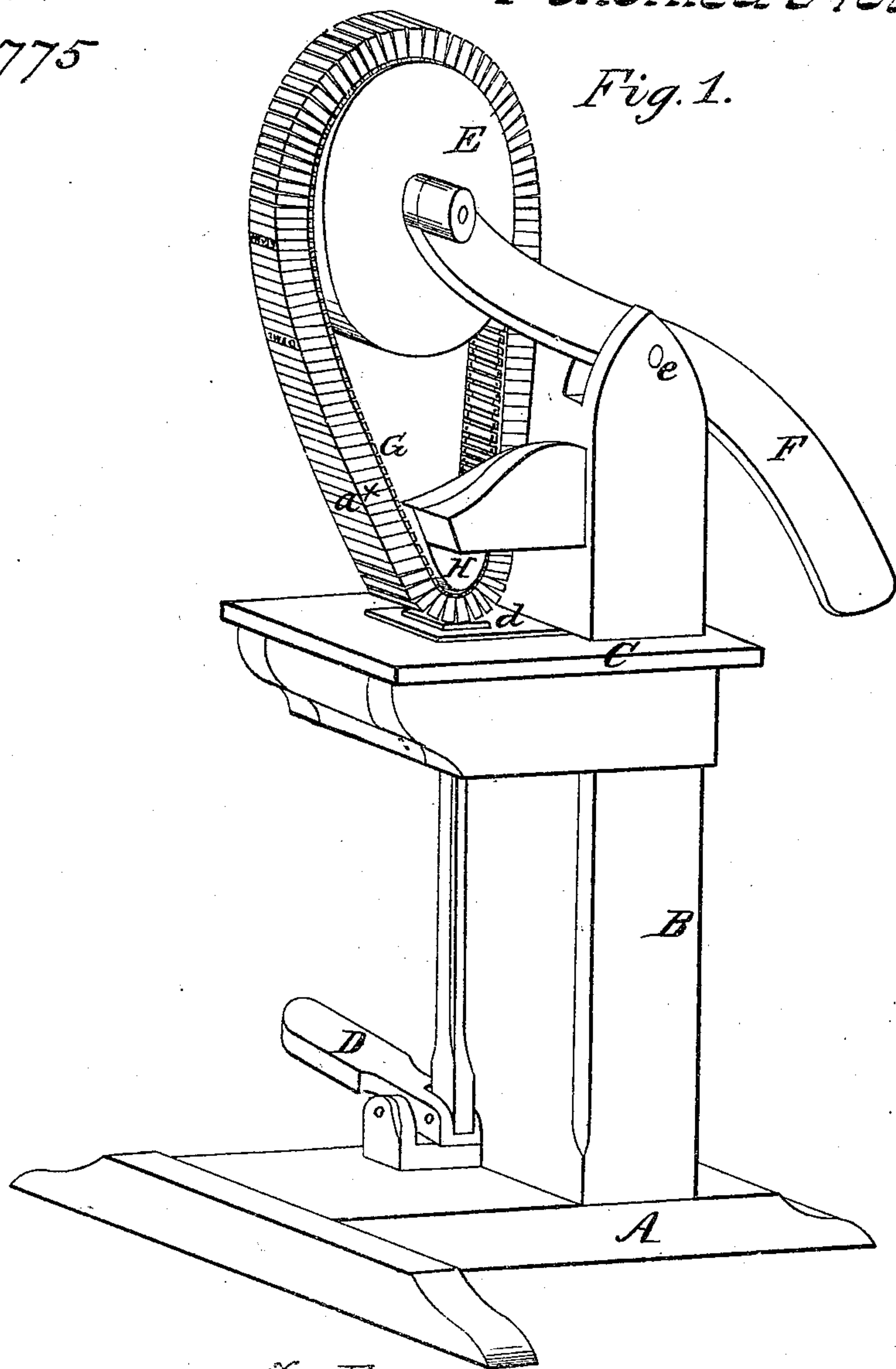


Fig. 2

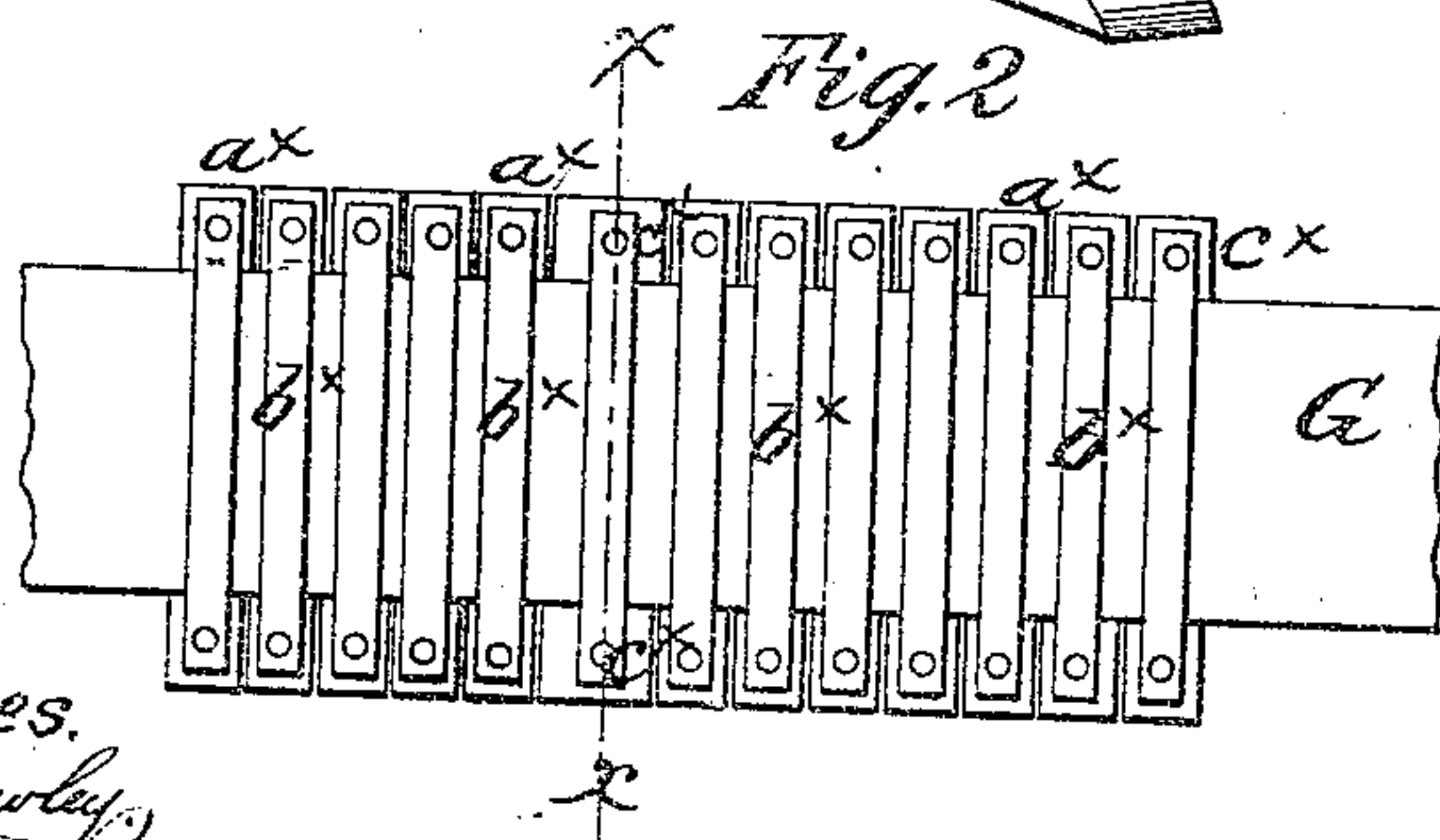
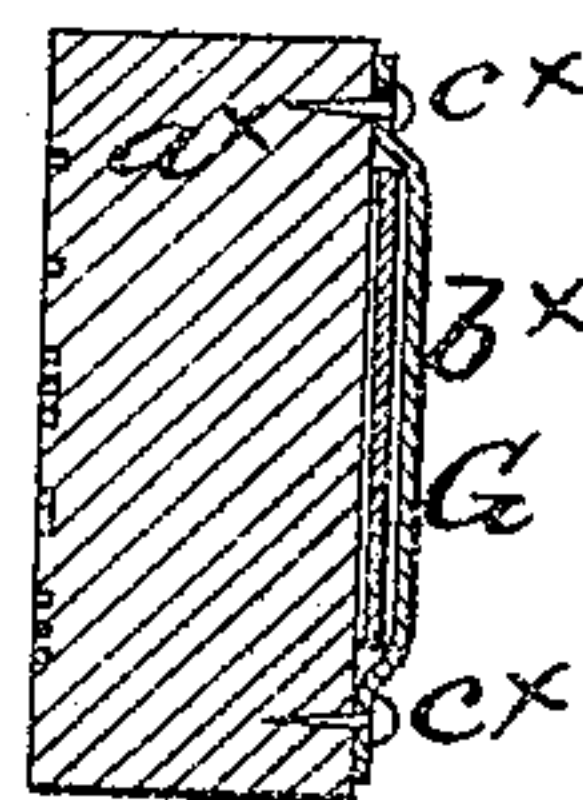


Fig. 3.



Inventor.

Alex. S. Davis.

Witnesses.

Richardson, Gawley

James Laird

UNITED STATES PATENT OFFICE.

ALEXANDER S. DAVIS, OF BOSTON, MASSACHUSETTS.

MODE OF ATTACHING BLOCKS TO BELTS OF PRINTING APPARATUS.

Specification forming part of Letters Patent No. 33,775, dated November 26, 1861.

To all whom it may concern:

Be it known that I, ALEXANDER S. DAVIS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful improvement in attaching engraved or indented wooden blocks to belts, the same to be used in a machine for printing addresses on newspapers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a printing-machine for the purpose specified; Fig. 2, a detached and enlarged view of a portion of the endless belt with a number of blocks attached according to my invention; Fig. 3, a transverse section of Fig. 2, taken in the line *x x*.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improved mode of attaching engraved or indented wooden blocks to an endless belt which is used in a machine for printing addresses on newspapers, and for which Letters Patent were granted to R. W. Davis and Daniel Davis, said Letters Patent bearing date September 6, 1859. In this patented machine a series of wooden blocks with the subscribers' names engraved or stamped thereon are attached by tacks to an endless belt, which passes over a pulley at the upper part of the machine and underneath a bed, which serves as a bearing for the blocks as the papers are forced against them in the act of printing. The difficulty attending the operation of this machine is the trouble and embarrassment of changing the blocks or altering them to suit the constantly-varying subscription-list.

It will be understood that all papers which are sent to one post-office have their addresses placed side by side, so as to facilitate the mailing operation, and all the blocks on the belt must be placed side by side in contact, so as to facilitate the inking of them. Hence by the old mode of attaching the blocks to the belt in many cases a large number must be detached in case a block requires to be added to or taken from the belt, and much time is therefore consumed in keeping the

endless belt of blocks correct with the mail-book.

The object of the within-described invention is to obviate this difficulty, and to this end I attach the blocks to the endless belt by means of straps or loops, substantially as hereinafter fully shown and described, whereby the blocks may be shoved along on their belt and any one of them readily detached therefrom or a new one added, as may be required.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A is a base or platform, and B is an upright, which is mortised therein.

C is a table or platform attached to the upright B, and *d* is a follower, which is fitted in the table C. This follower *d* has a treadle D connected with it, and also a spring. (Not shown.)

E is a pulley, the axis of which is fitted in a lever F, the latter being pivoted to the upper part of the upright B, as shown at *e*.

G is an endless belt, having engraved or stamped blocks *a*^x, and which passes around the pulley E and around a bed H, which is attached to the upright B just above the follower *d*.

The above parts constitute the machine patented by R. W. Davis and Daniel Davis, and previously alluded to.

The endless belt G may be of any flexible substance, and the blocks *a*^x are engraved or stamped so that the subscribers' names will be sunken into the faces of the blocks, the names when printed being white on a black ground. In the original machine the blocks *a*^x are tacked directly to the belt G, tacks being driven through the latter into the backs of the blocks, and hence it will be seen that whenever it is necessary to detach a block from the belt or add a new one to it at any point between the two end blocks a number of blocks will require to be removed to make room for the new one or to close up the space formed by the removal of one, and then be reattached to the belt.

Instead of tacking the blocks *a*^x directly to the belt G, I secure them thereto by straps or loops *b*^x, as shown clearly in Figs. 2 and 3.

These straps or loops may be of thin sheet metal tacked at their ends to the blocks a^x , as shown at c^x , the belt G passing through the straps or loops—that is to say, between them and the blocks. This arrangement, it will be seen, admits of the blocks a^x being shoved along on the belt G, while a block may be readily detached from the belt by loosening one tack only, so as to liberate one end of its strap or loop b^x . A block may also be attached to the belt with equal facility, the blocks on the belt being shoved along to make room for the new one.

The within-described invention does not involve any appreciable additional expense in attaching the blocks to the belt, while it avoids the embarrassment attending the shift-

ing and adjusting of the blocks as in the old mode of attachment, and thereby renders the patented printing-machine previously alluded to far more valuable than it now is.

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

The attaching of engraved or indented wooden blocks a^x to their endless belt G by means of straps or loops b^x , substantially as shown and described, when said blocks and belt are used in a machine for printing addresses on newspapers, as set forth.

ALEXANDER S. DAVIS.

Witnesses:

RICHARDSON GAWLEY,
JAMES LAIRD.