

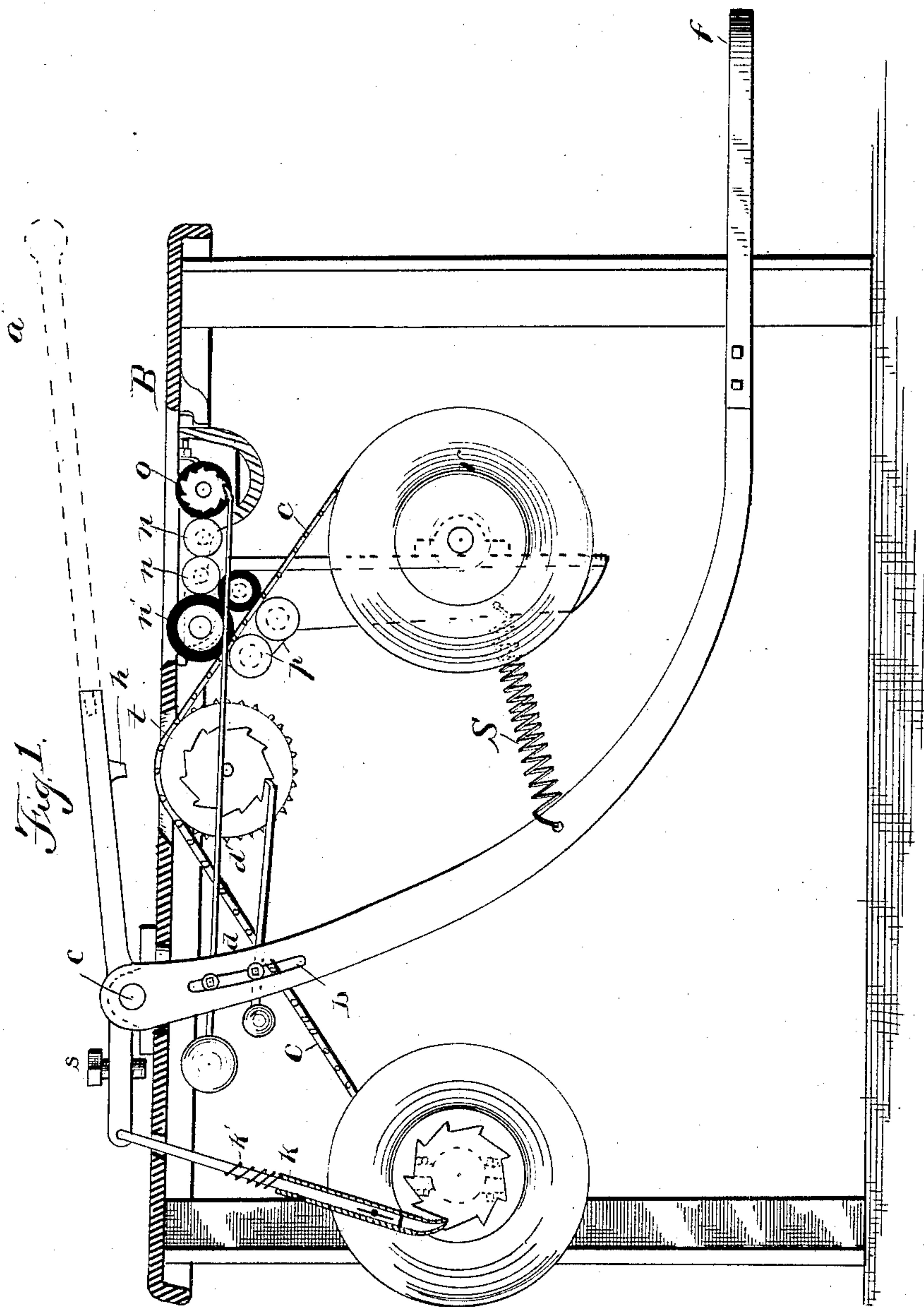
(No Model.)

2 Sheets—Sheet 1.

C. I. WILMANS.
ADDRESSING MACHINE.

No. 327,368.

Patented Sept. 29, 1885.



Witnesses:
G. W. H. Brown.
Ph. B. M. Arthur.

Inventor:
Chas. I. Wilmans.
Per
H. Harrison
Atty.

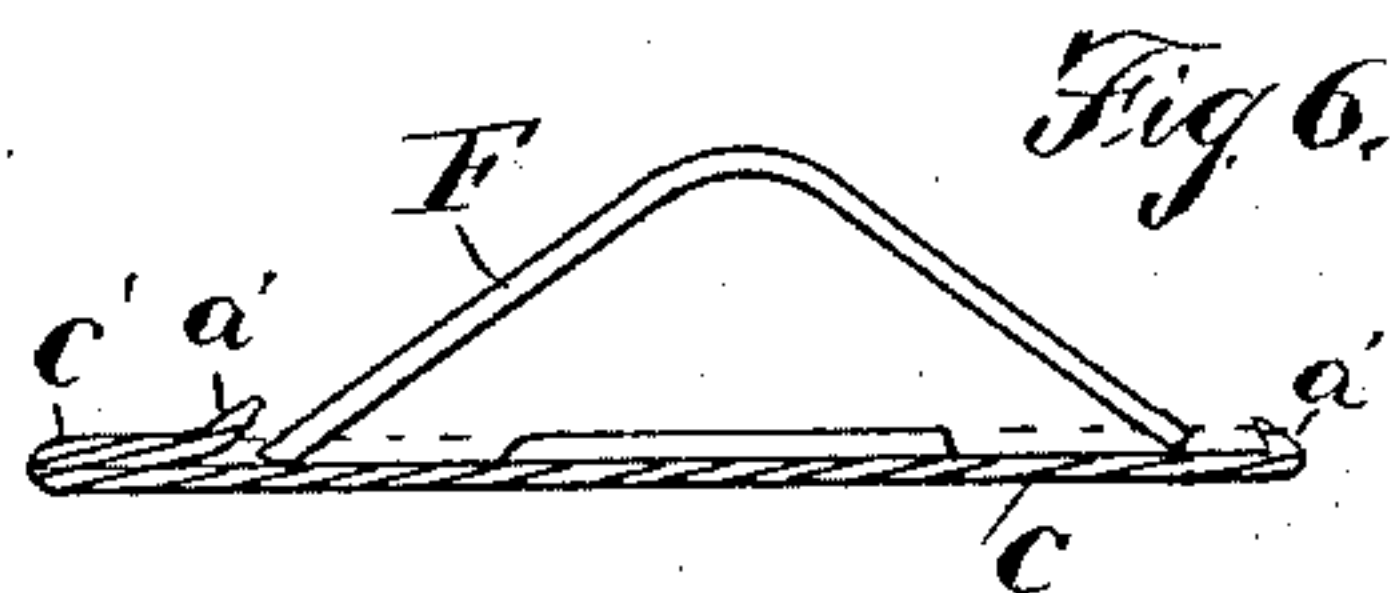
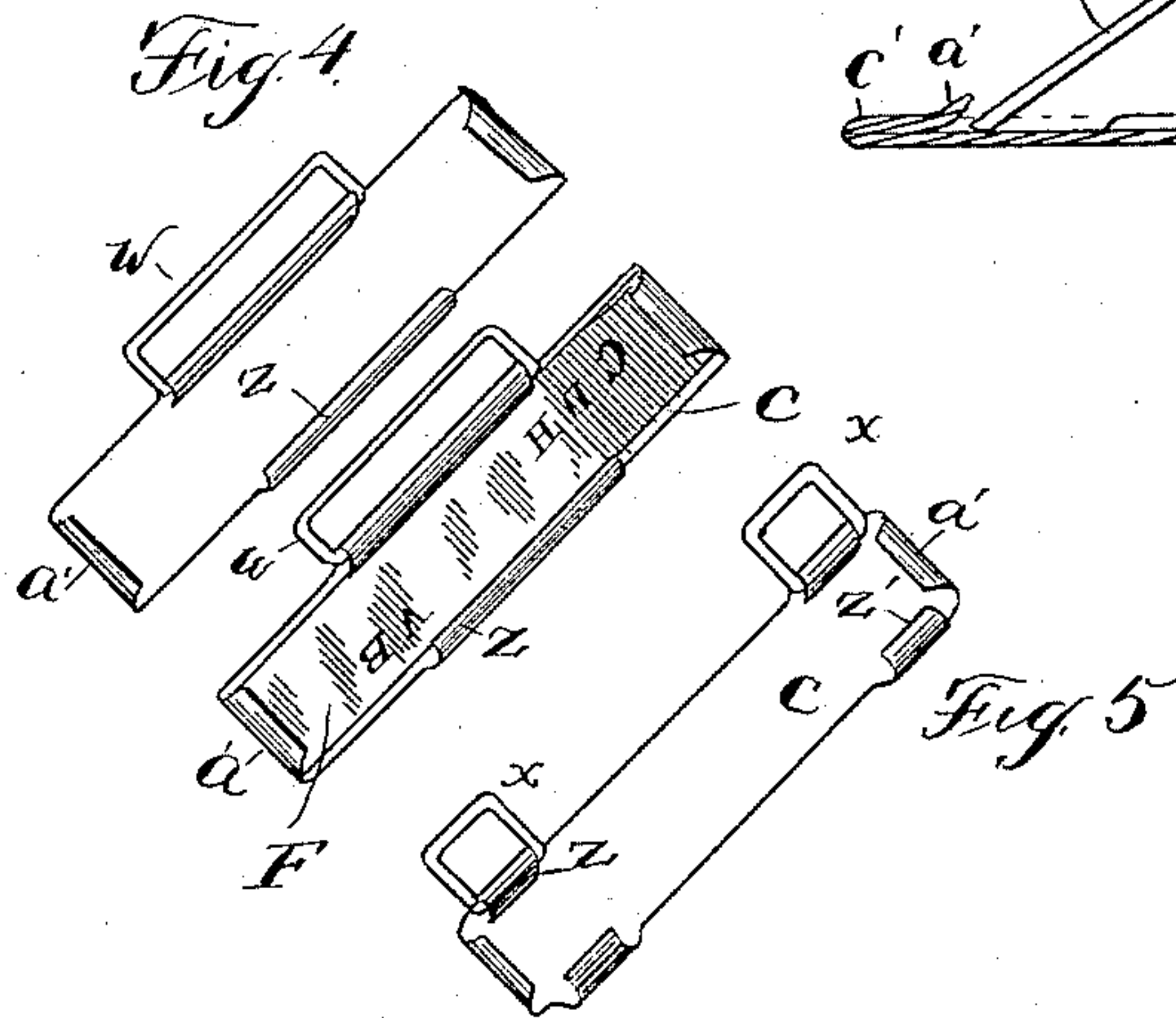
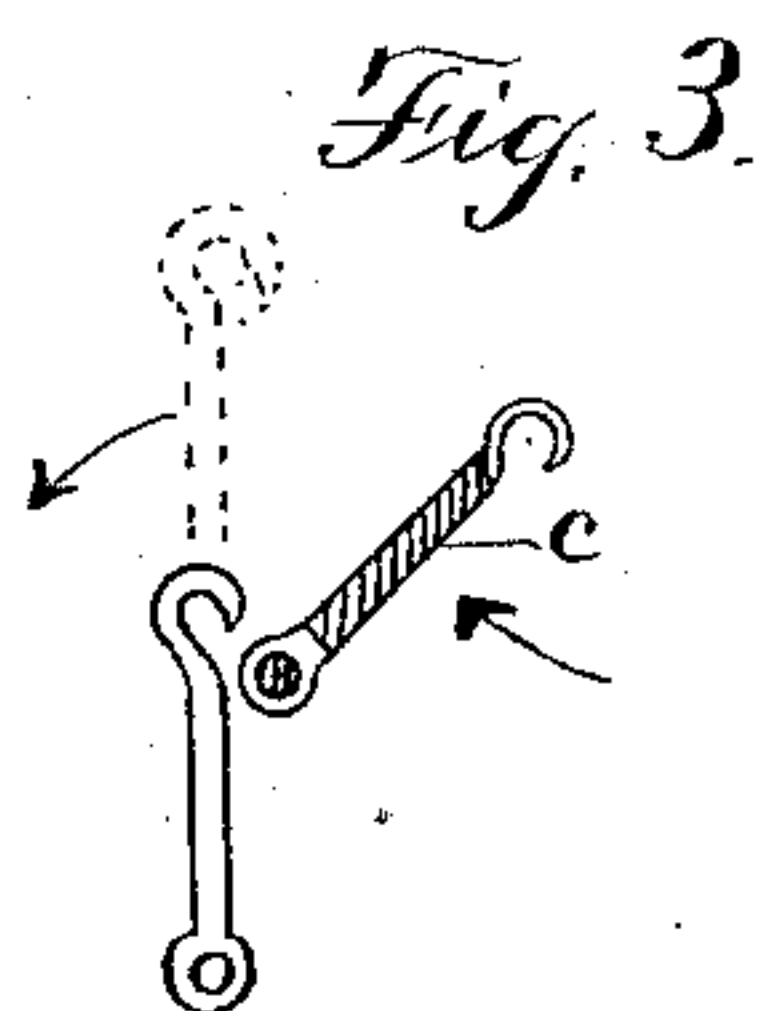
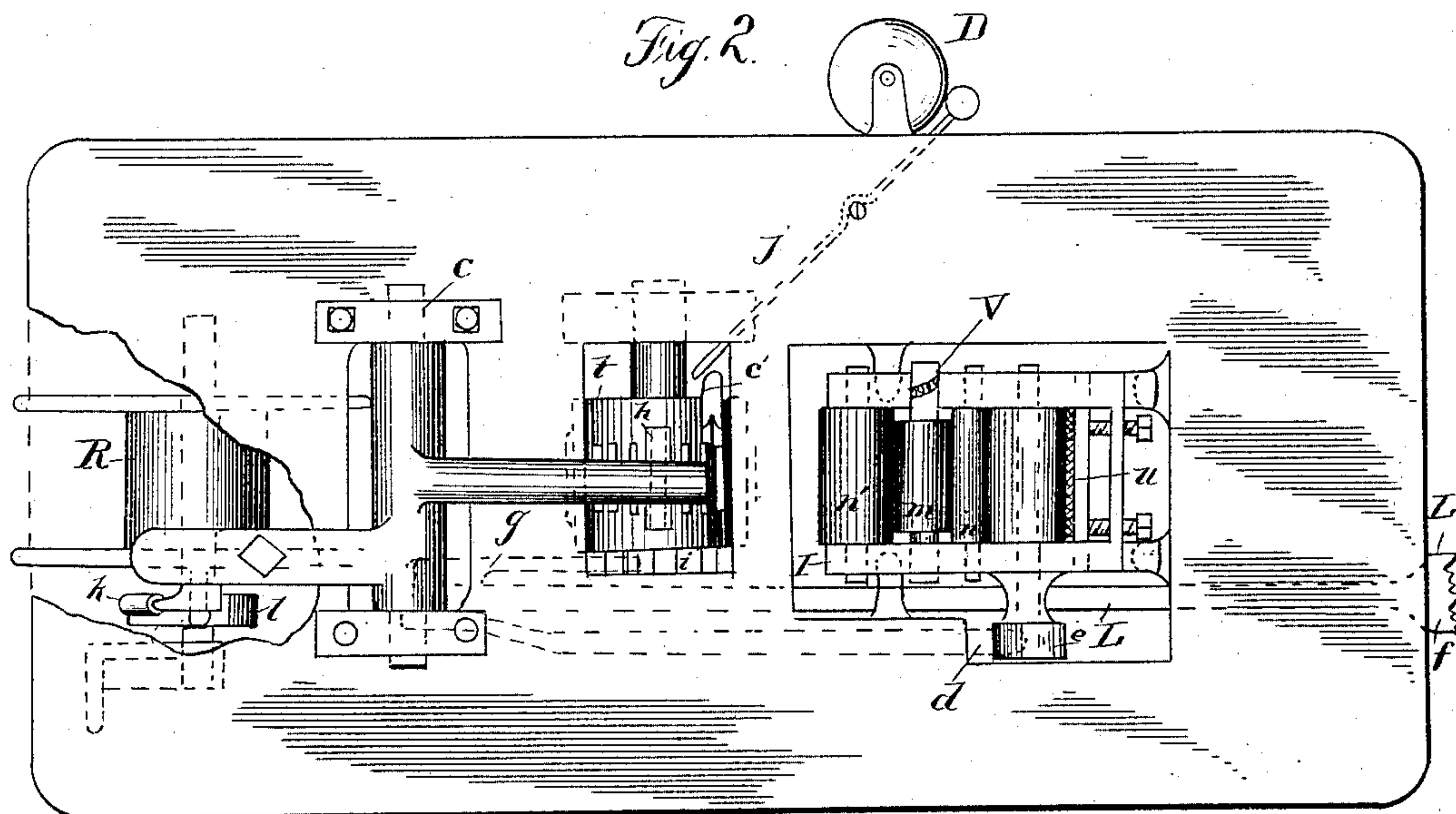
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2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

CHARLES IVENS WILMANS, OF CHICAGO, ILLINOIS.

ADDRESSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 327,368, dated September 29, 1885.

Application filed July 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES IVENS WILMANS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Addressing-Machines, of which the following is a specification.

My invention relates to improvements in addressing-machines in which the type for each address is in the form of a detachable link, making, when linked together, a long chain of names, which, when passed over a wheel, receives the pressure of a newspaper, envelope, circular, magazine, or other article, one by one, the chain being actuated so as to stamp each article with a different link or name.

Figure 1 is a longitudinal vertical cross-section. Fig. 2 is a plan view. Figs. 3, 4, 5, and 6 are views of different forms of chain-links.

The construction of the detachable link constitutes an important part of the invention, because once having the chain the mechanism necessary to utilize it could be made in various forms—for example, the wheel *t*, which carries and sustains the chain while it is stamped or pressed upon by the paper and presser *h*, could have the action reversed—that is, the whole wheel *t* could be lifted upward and press the chain against the newspaper. It is evident that the inking apparatus may be varied in the details of its construction, while the two wheels *R* and *r* may have substitutes in the shape of boxes, in which the chain would fall and pile up or be drawn out of the box, as the case may be. The necessity of having each link detachable is apparent when we consider the fact that the subscribers from any one post-office are constantly changing; hence the section of the chain corresponding to that post-office must have names taken off and put on continually; but that section ought never to have blank links, because the chain would be unnecessarily long, and because running over the blank ones would be a waste of time. Neither would it do to put names from one post-office into the section of chain belonging to another office to fill up blank links, because the papers so printed would have to be rearranged to have them in any order for mailing.

In Fig. 3 is shown a link which remains connected to the other links due to its angular position to its adjoining link. Thus the link *C* can be slid into or hooked into its adjoining link at the angle of about forty-five degrees, as indicated by the longer arrow; but after once being swung around to the dotted position cannot free itself from the other link, nor at any angle attained by swinging in the direction of circular arrow.

Fig. 6 shows the manner of detaching the type *F* (which may be a raised or sunk letter) from the links *C*, the bent ends *a' a'* of the link holding the type or lead *F* when in a straight or flat position; but, as shown in Fig. 6, the center is bent up, and in so doing draws its ends free from the link. The elongated end *C'* is made so as to protrude farther than the other links for the purpose of ringing a bell, *D*, Fig. 2, by striking the lever *j*. Thus this link can be placed at the end of any series of names where the operator may desire to stop or to skip the following series.

In Fig. 4, *F* shows the type or lead in position on the link, being held by the ends *a'* and the sides *z* and metal enveloping the wire *w* or *x*. The two forms shown in Fig. 4 are made out of comparatively thin metal, so as to take up but little room on the reel. In the second form the wire *x* is duplicated, one being placed on each end. The wire loops *x x*, being fastened permanently to one link, hook into hooks *z' z'* on the following link, and are kept from coming out by the presence of the lead *F*, which closes up the hook *z'*. The single wire loop *w* hooks into the hook *z* exactly the same as just explained about *x x*.

The machine is operated either by the removable hand-lever *a* or foot-lever *L f*. The chain *C*, being wound upon the reel *r*, is drawn from it by means of the toothed wheel *t*. In so doing it passes under the inking-rollers *n' n''*, thence on the wheel *t*, where the hammer *h* brings the newspaper to bear upon it and receive the subscriber's name. Then it is reeled up on the reel *R* by means of the flexible pawl *k*, which allows for the increasing circumference as the reel grows larger, the pawl itself shortening through the compressing of the spring *k'*. The lever *L* is journaled at *c*, about which it moves.

The movements of the main lever *L* are two

in number—first, the movement which causes the hammer *h* to press the paper on the stamp or type, during which movement all the wheels are at a standstill; but the pawls *d*, *g*, and *k* are getting ready for the return movement of the lever, which is the second movement, and is caused by the tension of the spring *S*.

The set-screw *s* regulates the forward movement of the pawls *d*, *g*, and *k*; but the length of stroke of the pawls *d* and *g* may further be regulated by moving their swinging or journaled points up or down in the slot *b* of the lever *L*.

The inking apparatus is moved by the pawl *d* acting on the wheel *e*, the ink-roller *o* operating the rest of the rollers by friction. The roller *m* vibrates lengthwise by means of the groove *v* in its journal, Fig. 2, in which a stationary pin causes the motion endwise.

The roll *n*, *n'*, and *n''* are of composition usual to printers' rollers.

The scraper *u*, Fig. 2, scrapes off the surplus ink on the first roller. Both the pawls *g* and *d* are held against their wheels by means of springs or by weights on their opposite ends.

Thus the second movement of the lever *L* causes one new link to be wound up, one new link to be inked, and one new one to be brought into position for printing on the wheel *t* by means of its teeth engaging the links.

I claim—

1. In an addressing-machine, a main frame

provided with reels and a printing-chain connecting them, in combination with an operating-lever having a reeling-pawl engaging one of said reels, said pawl being made in two parts connected by a spring, whereby the full stroke of the lever, when the reel is nearly filled, does not injure the chain or feed it too fast, substantially as and for the purpose set forth.

2. In an addressing-machine, a link or plate having its ends formed with under beveled flanges and one side formed with a hook and the other provided with a link or bail, in combination with a type-faced plate sprung into engagement with the end flanges and lying against the open side of the hook, whereby, when the plates or links are united in a chain, the type-plate locks them from disengagement, substantially as and for the purpose set forth.

3. In an addressing-machine, the combination, with a main frame, a pair of reels connected by a printing-chain, and an intermediate feeding and supporting drum over which this chain passes, of an operating-lever having connected to it the feeding-pawl, reeling-pawl, inking-pawl, and stamping pressure-arm, substantially as and for the purpose set forth.

CHARLES IVENS WILMANS.

Witnesses:

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JAMES E. DOWNEY,
GAIL SMITH.