

No. 753,671.

PATENTED MAR. 1, 1904.

LE ROY G. CONLY.
ATTACHMENT FOR PRINTERS' CHASES.

NO MODEL.

APPLICATION FILED AUG. 26, 1903.

2 SHEETS—SHEET 1.

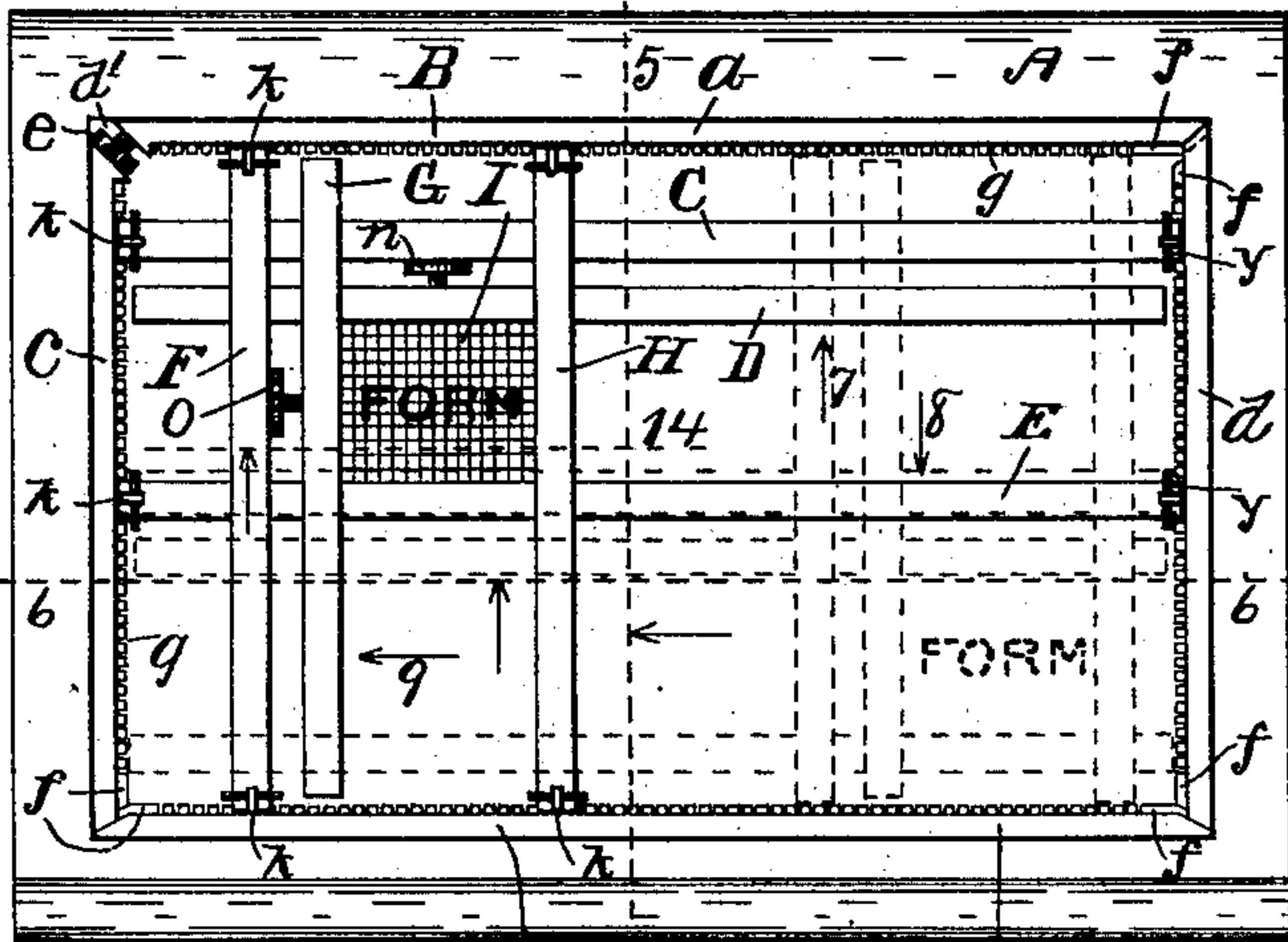


Fig. 1.

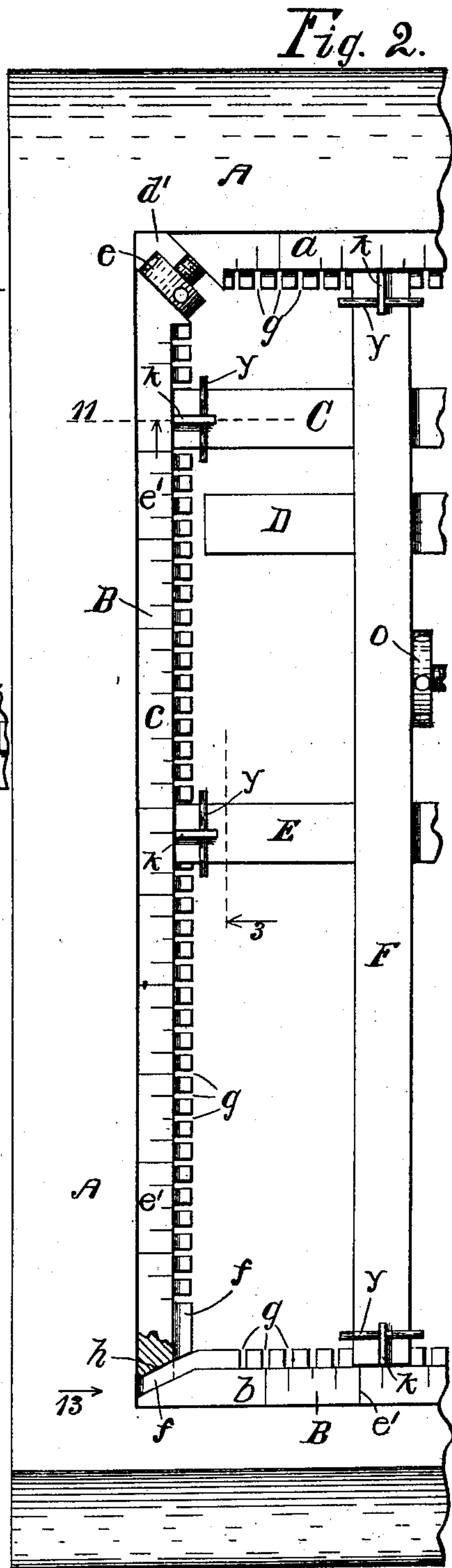


Fig. 2.

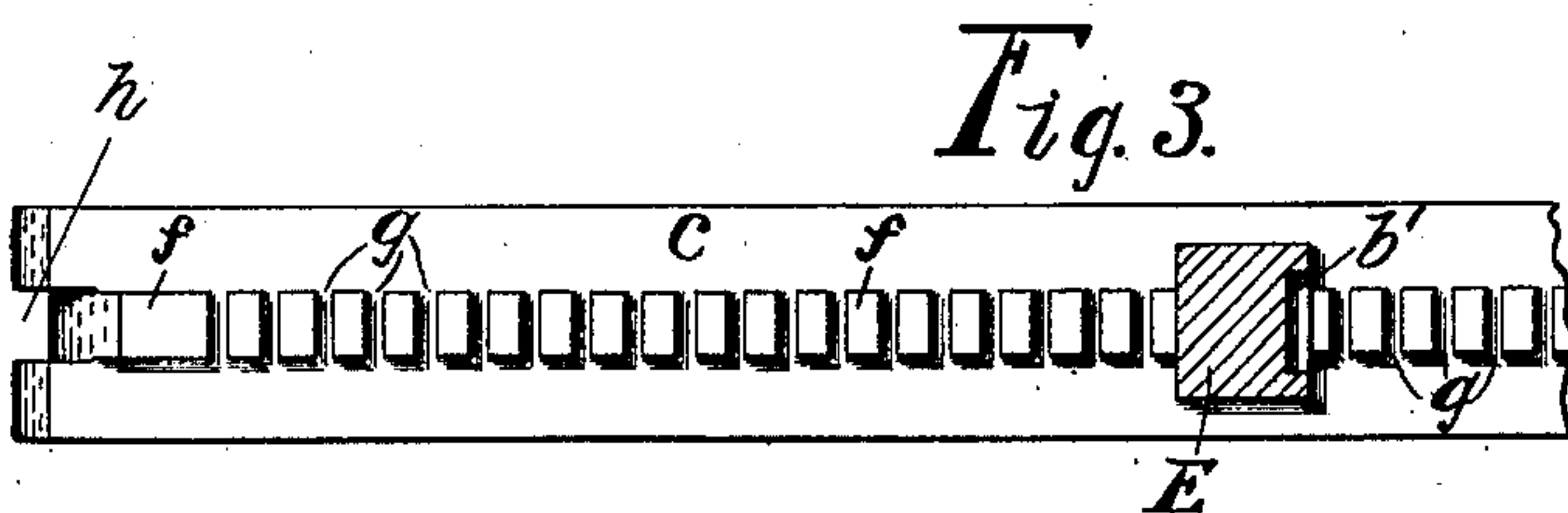


Fig. 3.

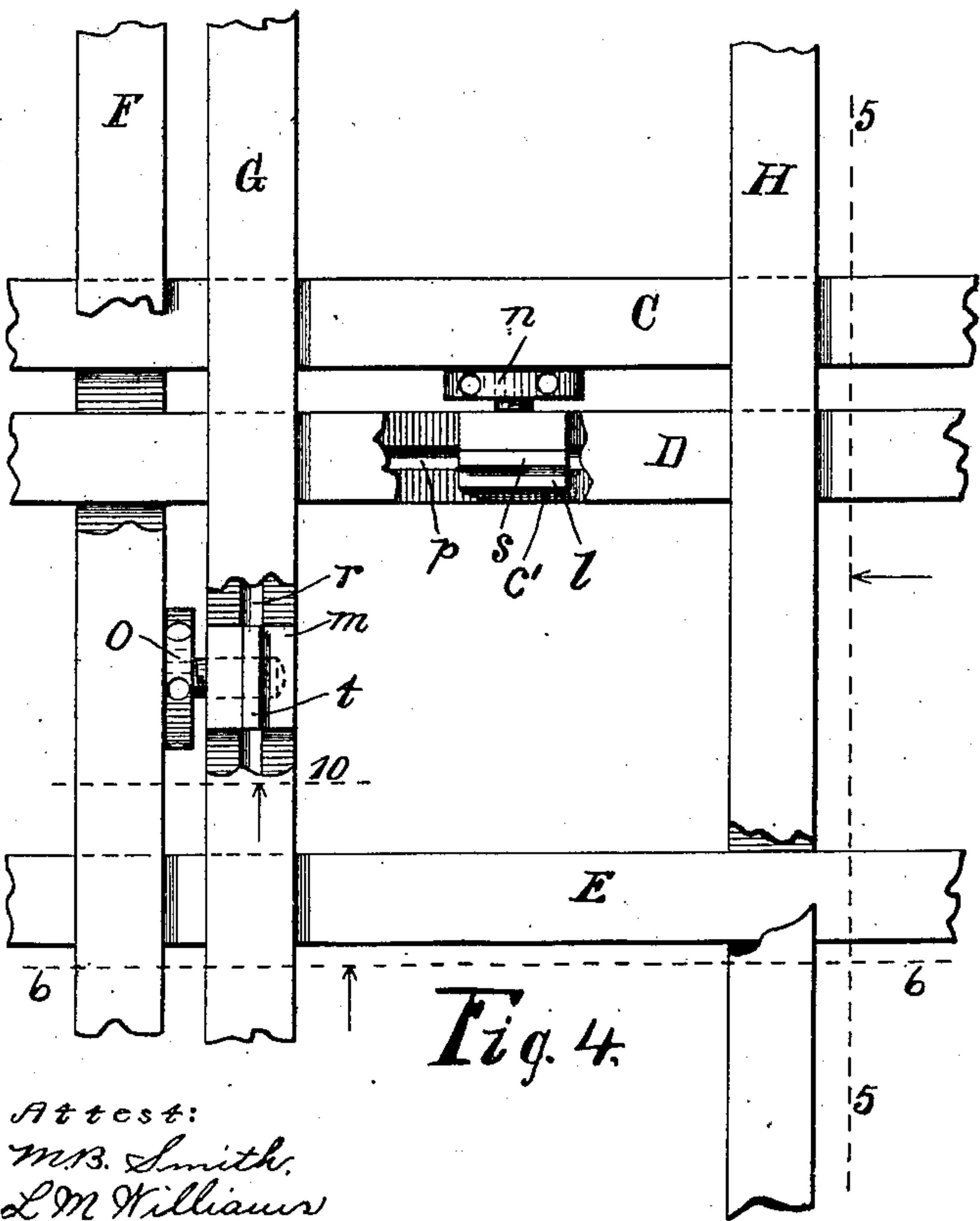


Fig. 4.

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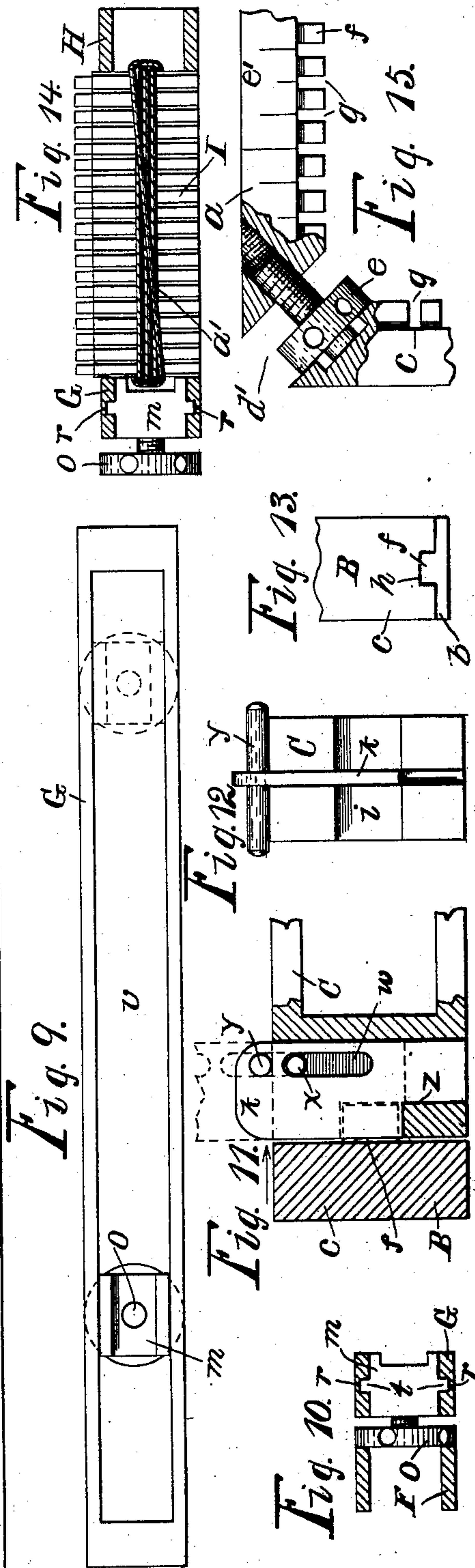
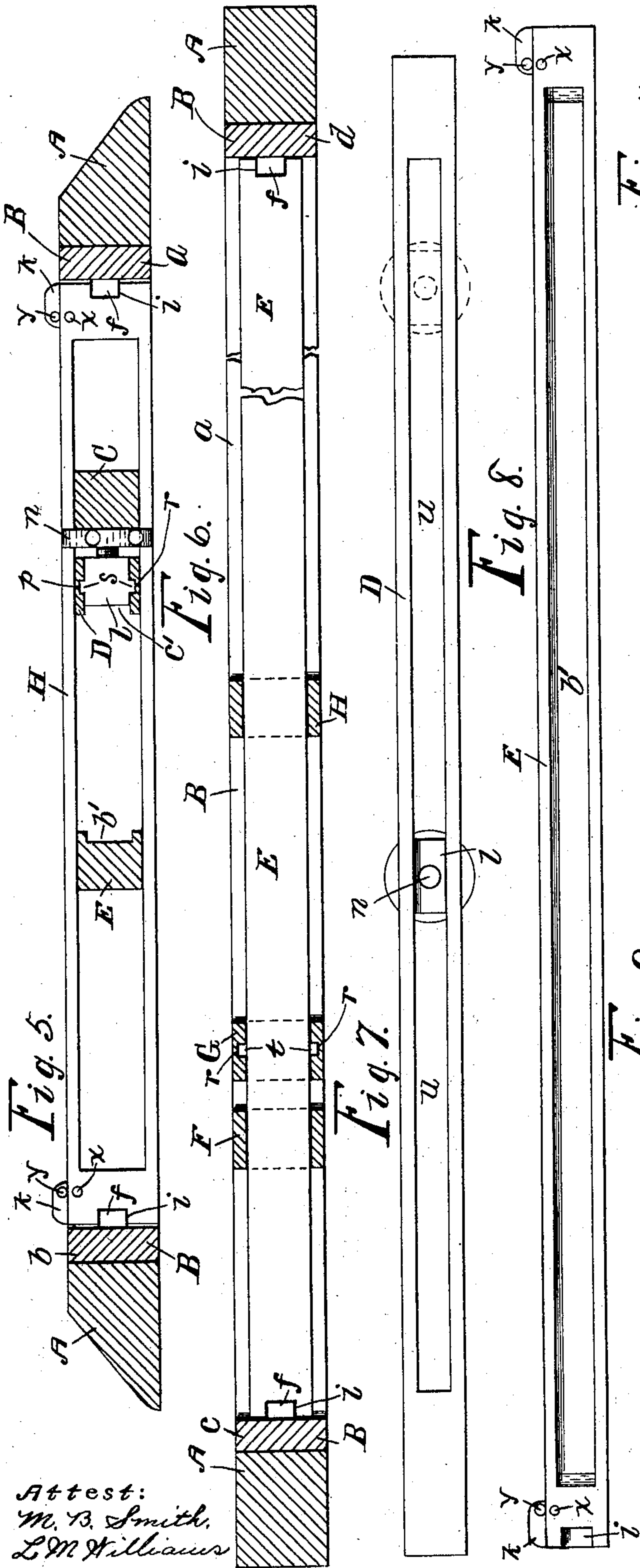
Inventor:
LeRoy G. Conly,
By C. B. Whitmore, Atty.

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2 SHEETS—SHEET 2.



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Inventor:
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UNITED STATES PATENT OFFICE.

LE ROY G. CONLY, OF ROCHESTER, NEW YORK, ASSIGNOR OF ONE-HALF
TO PERCY M. LANDIS, OF ROCHESTER, NEW YORK.

ATTACHMENT FOR PRINTERS' CHASES.

SPECIFICATION forming part of Letters Patent No. 753,671, dated March 1, 1904.

Application filed August 26, 1903. Serial No. 170,854. (No model.)

To all whom it may concern:

Be it known that I, LE ROY G. CONLY, of Rochester, in the county of Monroe and State of New York, have invented a new and useful
5 Improvement in Attachments for Printers' Chases, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention is an attachment for printers' chases, the same being hereinafter fully described, and more particularly pointed out in the appended claims.

The main object of my invention is to produce an attachment to be placed within an ordinary rectangular metallic chase used by printers for holding type-forms, &c., the attachment being designed to facilitate the placing and holding of the forms at any desired place within the chase, these attachments
15 being made of different sizes to fit different-sized chases.

Other objects and advantages of the invention will be brought out and made to appear in the following specification, reference being
25 had to the accompanying drawings, forming a part thereof.

Figure 1 is a plan of an ordinary printer's chase, showing my attachment in place therein, parts being shown in two positions, each by full and dotted lines. Fig. 2 is a plan at one end of the chase and attachment better showing the detail of construction, parts being broken away. Fig. 3 is an elevation of a part of the inner face of a section of the frame
35 seen as indicated by arrow 3 in Fig. 2, a lock-beam being transversely sectioned, as on the dotted line at the point of the arrow. Fig. 4 is a plan of parts of the associated beams defining the space occupied by the type-form, parts being broken away. Fig. 5 is a cross-section of the chase and the inner attachment on the dotted lines 5 5 in Figs. 1 and 4, further showing the forms of the parts. Fig. 6 is a longitudinal section of the chase and inner parts on the dotted lines 6 6 in Figs. 1 and 4, parts being broken out. Fig. 7 is a side elevation of the longitudinal follow-beam seen as indicated by arrow 7 in Fig. 1, the
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movable push-screw being shown in two positions by full and dotted lines. Fig. 8 is a front elevation of the longitudinal foot-lock beam seen as indicated by arrow 8 in Fig. 1. Fig. 9 is a front elevation of the transverse follow-beam seen as indicated by arrow 9 in Fig. 1, the movable push-screw being shown in two positions by full and dotted lines. Fig. 10 is a transverse section of parts on the dotted line 10 in Fig. 4. Fig. 11 is a longitudinal section of parts at one end of a lock-beam, showing the locking-key in position to hold the beam, parts being broken away and the section being on the dotted line 11 in Fig. 2. Fig. 12 is an end view of a lock-beam seen as indicated by arrow in Fig. 11, further showing the construction. Fig. 13 is an elevation of parts at one corner of the frame seen as indicated by arrow 13 in Fig. 2. Fig. 14 is a side elevation of a form or body of type set up and adjacent holding-beams for the form, the section being as on the dotted line 14 in Fig. 1. Fig. 15 is a plan of parts at one corner of the frame, more fully showing the form of the tightening-screw, parts being longitudinally sectioned by a plane coinciding with the axis of the screw. Fig. 1 is drawn to a scale smaller and Figs. 11, 12, and 15 to scales larger than that of the remaining figures.

In the drawings, A is an ordinary iron chase for printers' use for holding type-forms, cuts, &c.

B is a metal rectangular frame, consisting of four independent bars or sections *a b c d*, joined at their ends, fitted to the interior of the chase and held to place therein by means of a tightening-screw *e*, Figs. 1 and 2, at one corner. Each of these sections of the frame B is formed on its inner face with a central longitudinal rectangular rib *f*, Figs. 1, 2, 3, 5, 6, 11, 13, and 15, crossed at right angles by narrow equally-spaced kerfs *g*, as shown. At their abutting ends the sections *a b c d* are slanted, as shown, and at the right end of the section *a*, as appears in Fig. 1, and at both ends of the section *b* the ribs *f* bend outward to correspond with the slant of the ends of
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said two sections, as clearly shown in Fig. 2. These slanted ends of the ribs f occupying corresponding cavities h , Figs. 2, 3, and 13, in the ends of the sections $c d$ serve to hold all the sections of the frame B truly relatively in place with their edges even and in planes parallel with that of the chase A. The tightening-screw e for the sections of the frame B occupies a space d' , Fig. 2, between the adjacent separated ends of the sections $a c$ and has axial projecting parts, one threaded, extending in opposite directions, as shown in Fig. 15, into cavities in the opposing ends of the sections, respectively. These projecting parts of the tightening-screw serve to hold the ends of said sections truly in a plane.

Within the frame B are two longitudinal lock-beams C E and a coacting follow-beam D, Figs. 1 to 8 and 11, and two transverse lock-beams F H and a coacting follow-beam G, (see also Figs. 9, 10, and 12,) the beams crossing one another and all being held by the frame and together coacting to hold the form I, Figs. 1 and 14. The lock-beams C E and F H are each formed at each end with a central rectangular recess i , as shown in Figs. 5, 6, 8, and 12, to avoid or make way for the various ribs f of the frame B, each of said beams having a thin transverse locking-key k in position to enter one of the cross-kerfs g in the adjacent rib f . These keys when in the kerfs hold the various lock-beams against lateral motion in the frame B, the two follow-beams D G being shorter and free to move laterally, and all the longitudinal beams C D E passing through the transverse beams F G H, which are hollow, as shown. The follow-beams D G have shiftable push-blocks $l m$ in their respective rectangular cavities $u v$, Figs. 7 and 9, each block being pierced by a threaded push-screw $n o$, Figs. 1 and 4.

The follow-beams D G are each formed with two interior opposing longitudinal grooves $p p r r$, Figs. 4, 5, and 10, the push-blocks $l m$ each having longitudinal ribs or tongues $s s$ and $t t$ to occupy said grooves $p p r r$, as shown, so that while the blocks may freely move from end to end in the respective openings $u v$ of the beams they are prevented from having lateral motions in the beams or from passing out of the beams. The broad or enlarged heads of the push-screws $n o$ are adapted to bear squarely against the respective head-lock beams C F, as shown, when the parts are in place, the screws thus serving to push the follow-beams laterally away from the head-beams and against the form I. It will also be noted that when the follow-beams are thus pressed against the form to hold it in place the reaction of the pressure against the head-beams and the locking-keys k will effectually hold the latter temporarily in place, so they cannot drop out or become displaced, and so release the form and allow it to drop from the chase

when the latter is being handled before it is secured to place in the press.

In using this attachment for the chase in the matter of locking up forms the foot-lock beams E and H, Fig. 1, are moved to place in the frame B and locked by means of the keys k to meet the near or front and the right sides, respectively, of the form I, first located within the chase as desired. The follow-beams D and G, carrying the push-screws, are then moved up against the remaining or rear and left sides, respectively, of the form, as shown, the push-screws being previously turned well into the respective push-blocks $l m$ and adjusted in the beams to points opposite the middle of the body of the form. The head-lock beams C and F being brought against the heads of the push-screws, respectively, and locked in place by the keys k and the screws being turned in the blocks $l m$ against the head-beams, the form will be securely held between the four beams E, H, D, and G and locked in place within the chase, and it will be understood that as the lock-beams may be moved to occupy any desired positions within the frame B a type-form or a cut of any size within the capacity of the frame may be readily locked to place by means of the beams, as stated, and that a form comparatively small, as the one shown in Fig. 1, may be conveniently held by the beams any where within the chase, as appears by dotted lines.

The locking-keys k are commonly formed with slots w , as shown in Fig. 11, each being occupied by a cross-pin x , rigid in the beam, the cross-pins constituting guides along which the keys may move. These locking-keys are also provided with handles y (see Fig. 12) for drawing them upward out of the kerfs g when it is wished to shift the beams, said handles being simple cross-pins resting upon the respective beams, as shown, when the keys are in lock with the ribs f . Each locking-key is formed with an angular notch or recess z , Fig. 11, which when the key is pulled up, as shown by dotted lines, corresponds with or comes opposite the adjacent rib f and leaves the beam free to be moved laterally along within the frame B.

The form or block of type I is in common practice tied around at the middle with a cord or string a' , Fig. 14, to hold the parts together. On account of this the face of the foot-beam E in contact with said form is formed with a central longitudinal recess or cavity b' , Figs. 3, 5, and 8, to make way for the body of the string, as shown. The other beams G D H, touching the form, being hollow, ample room is provided for the string on the three sides of the form in contact with said beams. The push-block l , as shown in Fig. 4, is also made short to leave space c' for the string.

By unlocking all the beams and swinging

them into diagonal or slanting positions in the frame B all may be removed from the frame in a body, the frame being also removable from the chase by loosing the tightening-screw *e*.

In dividing the ribs *f* by the kerfs *g* the latter are preferably and as a matter of convenience spaced to correspond to the width or thickness of the body of a nonpareil type, and the sections of the frame are graduated, as shown at *e'*, Fig. 2, by lines opposite the kerfs to facilitate the placing of the lock-beams in positions parallel with the respective sides of the chase, the kerfs of the opposing frame-sections being exactly opposite one another.

What I claim as of my invention, and desire to secure by Letters Patent, is—

1. An attachment for a printer's chase, consisting of a frame formed of sections or bars, within the chase, means for securing the frame in the chase and screws at right angles to the tapered ends of adjacent sections and adjusting means on said screws disposed between the said adjacent tapered ends and accessible when the attachment is in the chase.

2. An attachment for printers' chases, consisting of a frame formed of sections or bars, within the chase, means for securing the frame in the chase, screws at right angles to the tapered ends of adjacent sections, and adjusting means on said screws disposed between the said adjacent tapered ends and accessible when the attachment is in the chase, said sections abutting at their ends at the corners of the chase.

3. An attachment for a printer's chase, consisting of a frame formed of sections or bars, within the chase, means for securing the frame in the chase, screws at right angles to the tapered ends of adjacent sections and adjusting means on the screws disposed between the said tapered adjacent ends and accessible when the attachment is in the chase, said sections abutting at their ends at the corners of the chase and said abutting ends interlocking.

4. An attachment for a printer's chase, consisting of a frame formed of sections or bars, within the chase, means for securing the frame within the chase, screws at right angles to the tapered ends of adjacent sections, adjusting means on the screws disposed between the said tapered adjacent ends and accessible when the attachment is in the chase, said sections abutting at their ends at the corners of the chase and said abutting ends interlocking, and adjustable beams mounted in said frame.

5. An attachment for a printer's chase the same being a frame consisting of sections joined at their ends, the adjacent ends of two of the sections having space between, and a tightening-screw for the frame, in the space, at right angles to and engaging both adjacent ends of the separated sections accessible when the attachment is in the chase.

6. An attachment for a printer's chase, consisting of a frame formed of sections, within the chase, and means for securing the frame in the chase, means at right angles to and directly engaging the adjacent inclined faces of adjacent sections for tightening the frame, and a series of beams within the frame and held by the sections of the frame, said means being accessible when the attachment is in the chase.

7. An attachment for a printer's chase, consisting of a frame formed of sections or bars, within the chase, and means for securing the frame in the chase, means at right angles to and directly engaging the adjacent inclined faces of adjacent sections for tightening the frame, and a series of longitudinal and transverse beams held within the frame, the longitudinal beams passing through the transverse beams, said means being accessible when the attachment is in the chase.

8. An attachment for a printer's chase, consisting of a frame formed of sections, within the chase, and means for holding the frame in place in the chase, means at right angles to and directly engaging the adjacent inclined faces of adjacent sections for tightening the frame, and a series of beams crossing one another in the frame, said means being accessible when the attachment is in the chase.

9. An attachment for a printer's chase, comprising a frame formed of sections joined, each section having an inwardly-projecting longitudinal rib, means at right angles to and directly engaging the adjacent inclined faces of adjacent sections for tightening the frame, cross-beams in the frame having their ends engaging said ribs, and means for locking the beams to the sections, said means being accessible when the attachment is in the chase.

10. An attachment for a printer's chase, comprising a frame in sections, the sections having adjacent ends inclined with their inclined portions parallel, a tightening device between and directly engaging said inclined ends, a pair of longitudinal lock-beams in the frame, and a pair of transverse lock-beams in the frame, there being a loose longitudinal beam between the longitudinal lock-beams and a loose transverse beam between the transverse lock-beams, said device being accessible when the attachment is in the chase.

11. An attachment for a printer's chase, comprising a frame in sections, the sections having adjacent ends inclined with the inclined portions parallel, a tightening-screw between and directly engaging said inclined ends, a pair of longitudinal lock-beams and a pair of transverse lock-beams in the frame, there being a loose longitudinal beam between the longitudinal lock-beams and a loose transverse beam between the transverse lock-beams, the lock-beams being laterally adjustable in the frame, said screw being accessible when the attachment is in the chase.

12. An attachment for a printer's chase, comprising a frame in sections, the sections having adjacent ends inclined with the inclined portions parallel, a tightening-screw between
5 and directly engaging said inclined ends, a pair of longitudinal lock-beams and a pair of transverse lock-beams in the frame, there being a loose beam between each pair of lock-beams, and means for pushing the loose beams
10 laterally between the lock-beams, said screw being accessible when the attachment is in the chase.

13. An attachment for a printer's chase, comprising a frame in sections, the sections
15 having adjacent ends inclined with the inclined portions parallel, a tightening-screw between and directly engaging said inclined ends, a pair of longitudinal lock-beams and a pair of transverse lock-beams in the frame, there being a
20 loose beam between each pair of lock-beams, said loose beams being hollow, and a push-block in each loose beam, and a push-screw threaded in each push-block in position to press the adjacent lock-beam, said screw being accessible
25 when the attachment is in the chase.

14. An attachment for a printer's chase, comprising a frame formed of sections joined, each section having an inwardly-projecting longitudinal rib divided by kerfs and parallel
30 inclined ends, a screw at right angles to said ends and directly engaging the same, a series of cross-beams in the frame with their ends adjacent to the divided ribs, and locking-keys in the beams to enter the kerfs, said screw being
35 accessible when the attachment is in the chase.

15. An attachment for a printer's chase, comprising a frame within the chase, said frame being in sections, the sections having inclined adjacent ends arranged parallel with each
40 other, and a tightening-screw between said inclined ends and directly engaging the same, a pair of longitudinal lock-beams and a pair of transverse lock-beams in the frame, and a hollow loose beam between each pair of lock-
45 beams, a block in each loose beam, and a push-screw threaded in each block, and means for holding the blocks within the loose beams.

16. An attachment for a printer's chase, comprising a frame within the chase, said frame
50 being in sections with inclined adjacent ends, and a tightening-screw interposed between and directly engaging said inclined ends, a pair of longitudinal lock-beams and a pair of transverse lock-beams in the frame, and a hollow

loose beam between each pair of lock-beams 55 formed with interior longitudinal opposing channels, and a push-block in each loose beam having ribs to occupy said channels, and a push-screw threaded in each push-block to press a lock-beam. 60

17. An attachment for a printer's chase, consisting of a frame within the chase and formed of four sections joined at their ends at right angles, and a tightening-screw interposed between and directly engaging said ends, said
65 sections having interior longitudinal ribs divided by cross-kerfs, laterally-adjustable beams in the frame having locking-keys to enter the kerfs, said kerfs being spaced to correspond to the width of the body of a type, said
70 screw being accessible when the attachment is in the chase.

18. An attachment for a printer's chase, consisting of a frame within the chase and formed of four sections joined at their ends at right
75 angles, and a tightening-screw interposed between and directly engaging said ends, and a series of cross-beams held within the frame and engaging the sections, said cross-beams being removable from the frame in a body, 80
said screw being accessible when the attachment is in the chase.

19. An attachment for printers' chases, consisting of a frame within the chase, a tightening-screw at right angles to and interposed between the inclined ends of the adjacent sections and directly engaging the same, and a series of cross-beams held by the frame and movable therein, the beams having movable parts to engage with the frame, and the latter
85 having marks to indicate the positions of the beams within it, said screw being accessible when the attachment is in the chase. 90

20. An attachment for printers' chases, consisting of a frame in sections within the chase, 95 the sections being provided with inclined parallel abutting ends having cavities, and a tightening-screw interposed between the said inclined ends and having its ends disposed in said cavities, said screw being accessible when
100 the attachment is in the chase.

In witness whereof I have hereunto set my hand, this 19th day of August, 1903, in the presence of two subscribing witnesses.

LE ROY G. CONLY.

Witnesses:

ENOS B. WHITMORE,
MINNIE SMITH.