

(No Model.)

T. H. KELLER.  
LINO TYPE MACHINE.

No. 606,168.

Patented June 21, 1898.

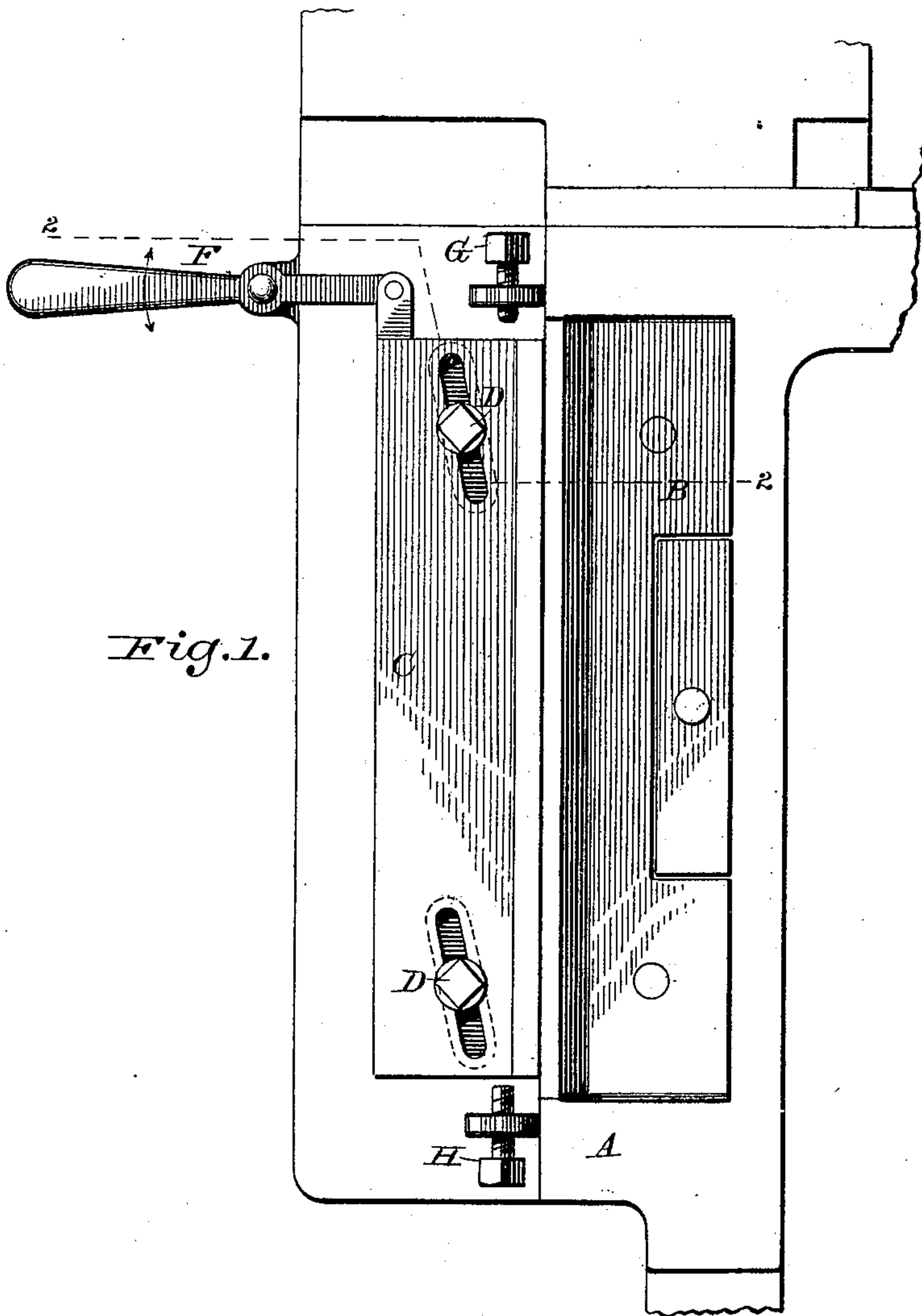


Fig. 1.

Fig. 3.

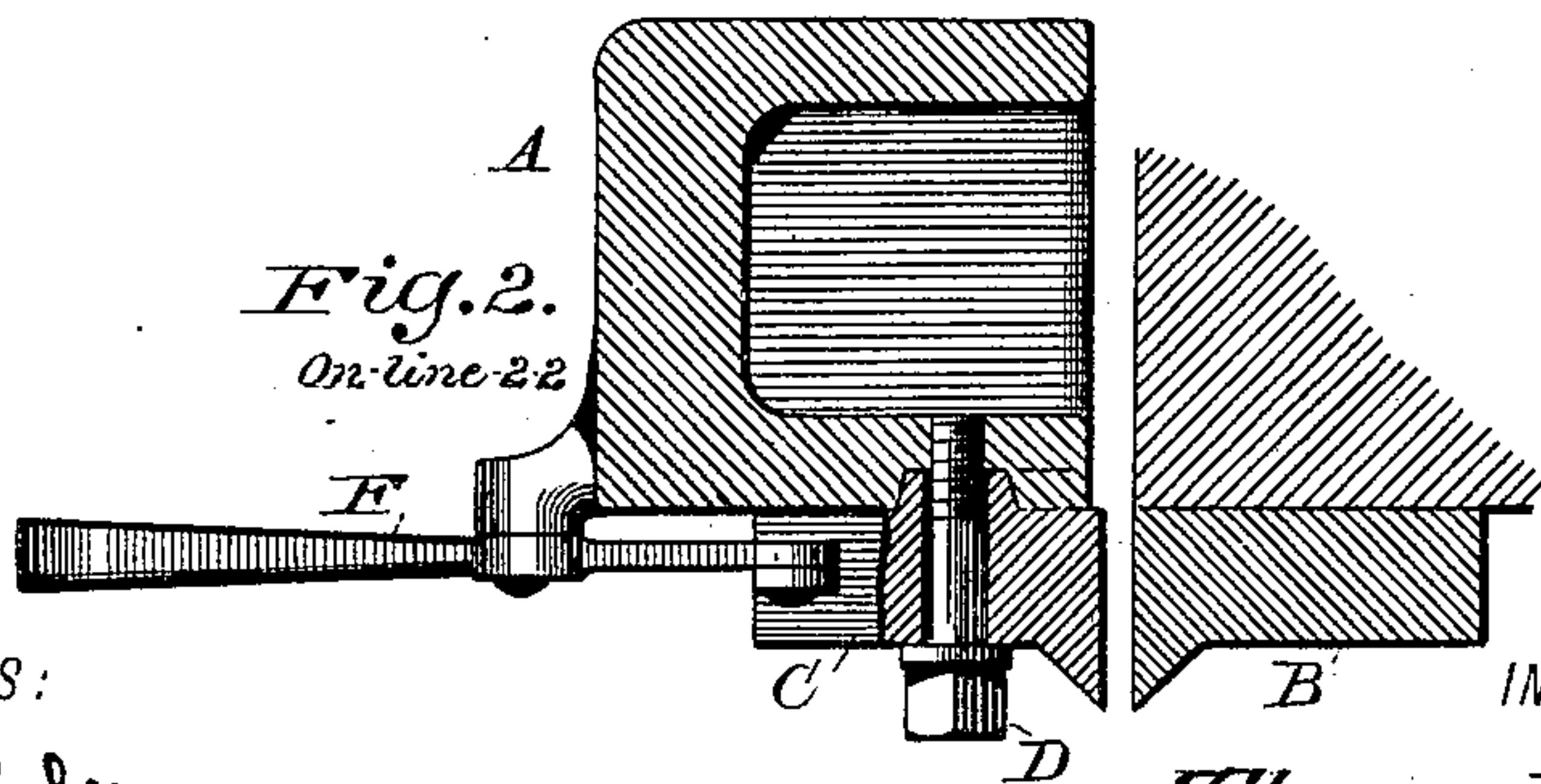
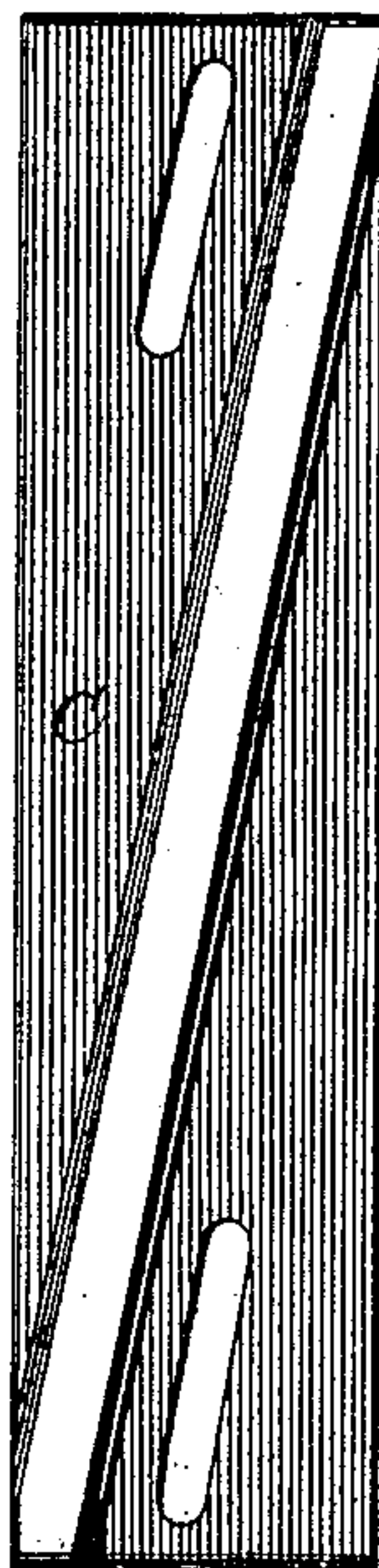


Fig. 2.  
On line 22

WITNESSES:

Arthur Ashley  
J. S. Elmore

INVENTOR

Thomas H. Keller

BY

P. Y. Long  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

THOMAS H. KELLER, OF NEW YORK, N. Y., ASSIGNOR TO THE MERGENTHALER LINOTYPE COMPANY, OF NEW YORK.

## LINOTYPE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 606,168, dated June 21, 1898.

Application filed April 18, 1896. Serial No. 588,167. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS H. KELLER, of New York city, county of New York, and State of New York, have invented a new and useful Improvement in Linotype-Machines, of which the following is a specification.

My invention relates to improvements in linotype-machines—such, for example, as that shown in Letters Patent of the United States No. 436,531, dated September 16, 1890, in which a slug of type-bar is ejected from a mold, in which it is formed between two trimming-knives, into a galley or receiver. These machines are frequently adjusted to change the thickness of the slugs produced. A change in the thickness of the slug produced necessitates a corresponding change in the distance between the trimming-knives. Heretofore this change has been effected by unbolting one of the knives, changing its position, and again bolting it fast, the adjustment involving also the substitution of one pair of spacing blocks or liners for another to secure the required accuracy of adjustment. My invention has in view the speedy adjustment of the knife to different positions without the disconnection of any of the parts. To this end I mount the movable knife on inclined guides, so that when moved endwise it will also be carried forward or backward. I combine with the knife thus mounted adjustable stop devices to limit its movement and a lever or equivalent operating device by which it may be instantly moved from one predetermined position to another.

I have represented my improvement as applied to the ordinary Mergenthaler linotype-machine, which may be in all other respects of ordinary construction.

Figure 1 is a side face view of the "vise-frame," so called, with the knives in position thereon. Fig. 2 is a cross-section on the line 2 2 of the preceding figure. Fig. 3 is a rear face view of the adjustable knife in an alternative form.

Referring to the drawings, A represents part of the frame commonly known as the "vise-frame," and B a fixed trimming-knife, and C the movable trimming-knife. The two knives stand in an upright position and the outgoing slug is trimmed between their edges

in the ordinary manner. The knife B is bolted rigidly to the frame in the ordinary manner, but the knife C is obliquely guided, so that when movable endwise it will also move toward or from the knife B.

In Fig. 1 the bolts D pass through oblique slots in the knife into the frame beyond and, if desired, through oblique ribs formed on the knife and seated in grooves in the frame. The bolts serve to hold the knife snugly in place against the frame and to guide or assist in guiding it so that its front edge is at all times parallel with that of the knife B. The bolts are commonly tightened in such manner that they will hold the knife in the position to which it may be adjusted, while at the same time they permit it to be removed by reasonable force.

F is a hand-lever pivoted to the frame and jointed at one end to the knife C, so that by means of the lever the instantaneous adjustment of the knife may be effected.

G and H represent two independent adjustable stop-screws mounted in the frame opposite the two ends of the knife C in order to arrest its movement in opposite directions, and thus limit the distance between it and the stationary knife. By adjusting these screws the knife adjustment may be controlled with great accuracy, so that the machine will trim the slug to the precise thickness required.

When the end of the lever is depressed, the knife C will be raised and drawn backward until arrested by the upper stop G, and in this position the machine is adapted to trim slugs of the maximum thickness required.

When the lever is raised, the knife is carried downward and inward until arrested by the stop H, and in this position the machine will trim slugs of minimum thickness.

The essence of the invention resides in mounting the knife on oblique guides and in combining therewith stop devices to arrest the knife in two predetermined positions and means for effecting the movement by suitable connections. It is obvious that in place of the lever any equivalent contrivance familiar to the mechanic may be employed and that in place of the slots and bodies other equivalent oblique guides may be substituted. For example, the knife may be con-

structed, as shown in Fig. 4, with a single oblique guiding and supporting rib on its back to enter a groove in the frame.

Having thus described my invention, what I claim is—

1. In a linotype-machine the combination of the stationary knife, a movable opposing knife having its edge parallel therewith, obliquely-arranged guiding devices for the movable knife, independent adjustable stops to limit the motion in opposite directions, and a mechanical means for effecting the movement at will.

2. In a linotype-machine the combination of

a stationary knife, an obliquely-guided knife, a lever whereby the latter may be moved endwise and stop devices adjusted to permit the movement of the knife, but limiting its motion in both directions whereby the knife may be instantly adjusted to trim slugs of either of two predetermined thicknesses.

In testimony whereof I hereunto set my hand, this 14th day of April, 1896, in the presence of two attesting witnesses.

THOMAS H. KELLER.

Witnesses:

GEORGE R. WAGNER,  
DANIEL J. DUNICAN.