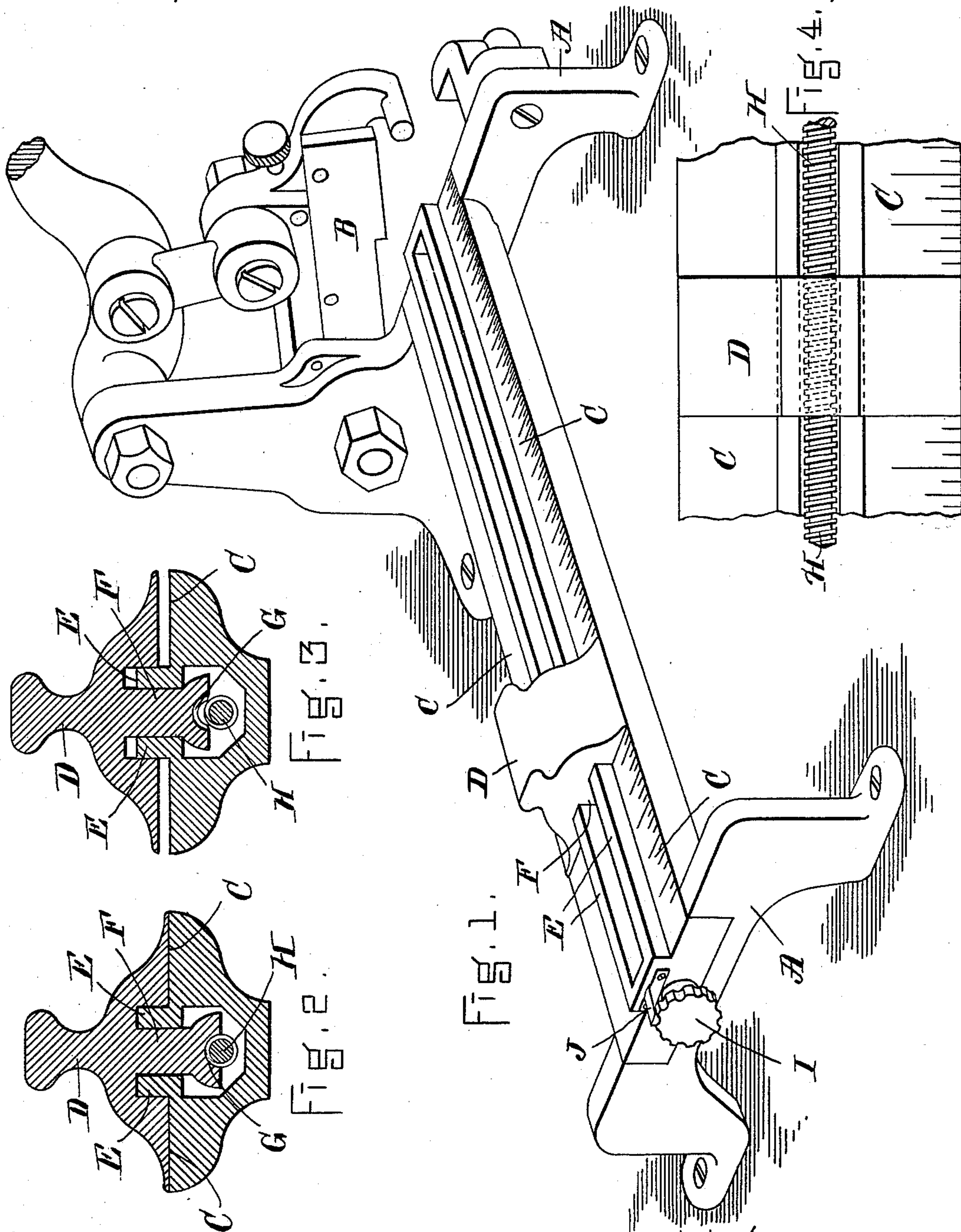


(No Model.)

A. W. PREECE.
PRINTER'S RULE AND LEAD CUTTER.

No. 509,764.

Patented Nov. 28, 1893.



WITNESSES.

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ARTHUR WILLIAM PREECE, OF BOSTON, MASSACHUSETTS.

PRINTER'S RULE AND LEAD CUTTER.

SPECIFICATION forming part of Letters Patent No. 509,764, dated November 28, 1893.

Application filed March 17, 1893. Serial No. 466,418. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR WILLIAM PREECE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Printers' Rule and Lead Cutters, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to provide an improved apparatus for cutting printers' rules and leads to the precise lengths required in type-setting.

My improvement upon the existing machines for this purpose consists in a gage quickly adjustable over wide distances by a sliding movement, and, when thus set approximately, adapted to be accurately adjusted to the exact distance from the cutter to insure cutting the rules to the length required. My machine is therefore provided with a flat graduated bed and a square-threaded longitudinal screw running from end to end thereof, and with a gage-block fitting upon such bed and having in its lower part a semi-cylindrical or other threaded concavity fitting upon said screw but adapted to be raised out of engagement therewith when desired for speedy adjustment over a considerable space. This threaded portion is preferably a central rib or foot extending down into a recess in the bed from which it can not be directly raised far enough for entire detachment from the machine but only far enough for the free sliding movement either way incident to quick adjustment over a large space. The screw has a knob to turn it by with twelve recesses in its face or edge which engage with a spring pin or arm fitting into such recesses to indicate twelfths of a revolution, each revolution causing the gage to travel one pica or twelve points.

In the drawings, Figure 1 is perspective view of a machine embodying my improvements. Figs. 2 and 3 are transverse sections through the bed, the screw shaft and the movable gage the gage being, in Fig. 3, raised from the screw for quick longitudinal movement. Fig. 4 is a partial plan view, showing the screw in the sunken central recess of the bed.

A represents the frame of the machine, and

B a desirable form of cutting mechanism now in common use.

C C is a graduated flat bed upon which the rules or leads to be cut are laid, and D is a movable gage made adjustable lengthwise of the bed, to indicate by the graduating marks the desired length of rule or lead.

E E represents central longitudinal ways or tracks on which the gage moves freely.

Between the ways E E is a longitudinal recess to receive a central rib or foot F on the sliding gage. This rib or foot has at bottom a half threaded concavity G or a rack-like form to engage with the coarse square threads of the screw shaft H running from end to end of the frame and having bearings for rotary movement only. When the gage D rests on its ways E, with its edges covering part of the graduated bed, the foot F engages with the screw shaft H and the gage is moved only by the rotation of such shaft; but when the gage is raised, as in Fig. 3, it may be freely moved over the whole or any part of the length of the bed. This is done to place the gage in an approximately correct position, after which the screw is turned to adjust the gage with precision and hold it in place. The screw shaft has a terminal knob or disk I to rotate it by, and its periphery is shown as formed with twelve recesses, each indicating a point, and every complete revolution a "pica," as will be understood by printers. I provide a light spring J, Fig. 1, the free end of which has a roller or curved form fitting into the several recesses in succession, to hold the screw in any desired position, but not to interfere with its rotation when desired.

I claim as my invention—

1. In a rule and lead cutting machine, a suitable frame and cutting device, a flat graduated bed for the material to rest upon and a sliding gage mounted on guide ways for quick longitudinal movement, in combination with a central screw shaft having a rotary motion only and with a partial screw in the under side of the gage capable of engagement with and disengagement from such shaft, substantially as and for the purpose set forth.

2. In a rule and lead cutting machine, the cutter, the bed and the adjustable sliding

gage formed with a partial screw thread in
its under side, in combination with the lon-
gitudinal screw shaft engaging in such par-
tial screw thread, and with the recessed knob
5 or collar on the shaft and a yielding arm reg-
istering therewith to indicate fractions of a
revolution, substantially as set forth.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses on this 9th day of 10
March, 1893.

ARTHUR WILLIAM PREECE.

Witnesses:

A. H. SPENCER,

JOHN C. LANE.