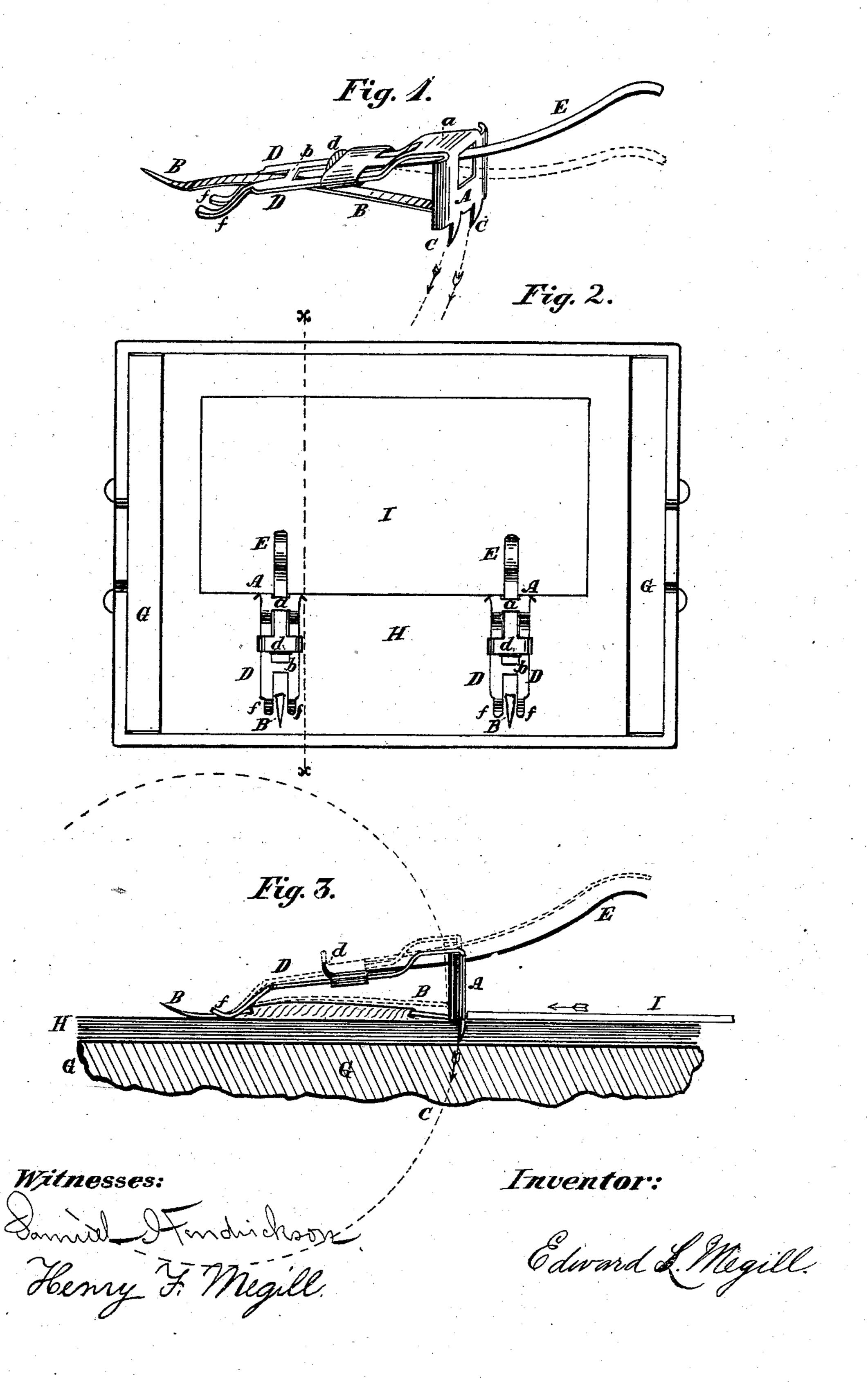
E. L. MEGILL.

Feed Gage for Printing Presses.

No. 241,556.

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FEED-GAGE FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 241,556, dated May 17, 1881.

Application filed March 29, 1880. (Model.)

To all whom it may concern:

Be it known that I, EDWARD L. MEGILL, of the city of Brooklyn, county of Kings, and State of New York, have invented certain new and 5 useful Improvements in Feed-Gages for Printing-Presses, of which the following is a specification.

The invention relates more particularly to that class of feed-gages which are attached to ro or inserted within the tympan sheets or paper covering the platen of the printing-press, and which are used for the purpose of regulating and maintaining the position of the sheets to be printed when presented to the type.

My invention has for its object to provide a more perfect, convenient, and reliable gage pin.

The invention consists in so arranging the teeth of the gage with the prong as to penetrate the tympan-paper in a circular direction, 20 as if the prong were pivoted at its farthest or lowest part to the surface of the tympan-sheet. The circular motion is slight, but it is sufficient to prevent the gage from tending to the front or rear in being forced down, as it is under-25 stood that the gage is previously set to its required position. The teeth therefore, being bent or curved slightly to the reaward, are given a firmer hold as against the direct strokes of the sheets when fed to the gage.

It also consists in providing the gage-head with one or more presser arms or stays, elastic if desired, which, when the point or prong of the feed-gage is fast into the tympan-sheets, project over and press down upon the outer 35 surface of the same, and serve as a brace to keep the gage-head down tightly upon the

tympan-sheet.

It also consists in arranging the said presserarms in combination with the spring-tongue 40 or adjustable lip, and the latter may be readily attached or detached while the feed-gage is fastened on the tympan-sheets; and it finally consists in certain details of constructions and arrangements hereinafter more fully described.

In the accompanying drawings, in which similar letters of reference indicate corresponding parts, Figure 1 is a perspective of my improved feed-gage. Fig. 2 is a top plan of the platen of an ordinary printing-press covered 50 by the tympan-sheets, with two of my feedgages attached thereto in position and a card resting against them; and Fig. 3 is an enlarged

longitudinal transverse section (broken away) on the left of line x x of Fig. 2, giving an edge view of the feed gage, and in dotted lines show- 55 ing its position just prior to forcing the teeth down.

G is the platen, H the tympan-sheets, and I a card placed in position to receive the im-

pression from the type.

Of the feed-gage, A is the gage-head, which stands perpendicular, and when fast to the tympan-sheets is at right angles with its surface. The sides of the gage head are rounded off toward the back of it.

Extending from the lower side of the gagehead is the prong B, which, as usual, has a curvature about the middle of its length with its point turned upward; but the prong B may be made straight. Also, projecting downward 70 from the lower side, as usual, are the teeth C C. These teeth, however, are inclined or bent slightly to the rearward, and made sharp at

the point or edge.

To the upper side or top of the gage-head A 75 are suitably connected the presser arms or stays DD, which, like the prong B, extend backward to the rear of the gage-head. Two cross-pieces, a and b, connect the said presser-arms and hold them parallel to each other. The outside edges 80 of the presser-arms are even or parallel to each other down to the curved termini or feet ff, where they are narrowed off or cut away to allow the spring-tongue E to pass off. The said spring-tongue E is widened at the lower end 85 or root and bent around the said outer edges of the presser-arms just far enough to retain a hold until they reach the said termini ff. The presser-arms come in contact with the tympan-sheets at the said termini, which permit 90 the said spring-tongues to slide off and on after the feed-gage has been attached to the tympan-sheets. The termini f f are convexly curved to prevent their piercing or scratching the tympan-sheets when the feed-gage is be- 95 ing secured.

In the center of the root of the spring-tongue E is located a thumb-catch, d, by which the same is moved. The said spring-tongue slides backward and forward over the presser-arms 100 D D and passes out under the cross-piece a and through the opening in the gage-head A. Its outer end is bent downward, so that when brought in contact with the furniture in the

chase it will slide over its surface and spring down without becoming disarranged.

The presser-arms D D may be made in any suitable shape, with or without cross-pieces or feet, and may lie flat on the tympan-sheet their

full length.

The operation of the device is as follows: When the prong B is inserted into the tympansheets H, and while it is being passed in under to the same, the presser-arms D D separate from the prong and ride up over the outer surface. After the prong B is passed in near to its length, the finger of the hand is pressed over the point to bring it up through. Then the 15 gage-head is brought in its true position in relation to the form of type by sliding the feedgage backward or forward, and then, to keep it accurately and firmly in its place, the teeth C C are forced down into the tympan-sheets. 20 The spring-tongue E is then pushed out in front of the gage-head as far as required, being limited by the margin of the sheet to be printed. The parts being properly arranged, the springtongue may be removed while the feed-gage is 25 in position and be instantly substituted by another of a different length. When released from the tympan-sheets, the prong B and the presser-arms D D spring back and become reset across each other in the form shown by Fig.

30 1, and it will be readily understood that when

secured considerable tension is created within

and upon the tympan-sheets, and the gage-head

is caused to bear down. In addition to these

features, the teeth C C, by their peculiar construction, effect a safe and powerful hold in 35 themselves, especially as against the direct pressure or stroke of the sheets or cards when being fed.

The circular dotted lines and arrows at C indicate the direction the teeth take when 40

pressed into the tympan-paper.

The arrow at I points in the direction the sheets or cards take when being fed to the gage-head.

I claim—

1. A feed-gage provided with teeth projecting downward at an angle or curve corresponding to a circle the center of which is located at the farthest or lowest part of the prong B, substantially as and for the purpose herein described and set forth.

2. A feed-gage provided with a prong, B, and presser-arms arranged to rest upon the surface of the tympan-sheet, and, in combination with the prong B, produce a tension and 55 serve as a brace to keep the gage in position, substantially as herein described.

3. The combination, with the slotted gage A, having teeth C C, of the presser-arms D D, the prong B, and adjustable spring-tongue E, sub- 60

stantially as herein described.

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Witnesses:

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