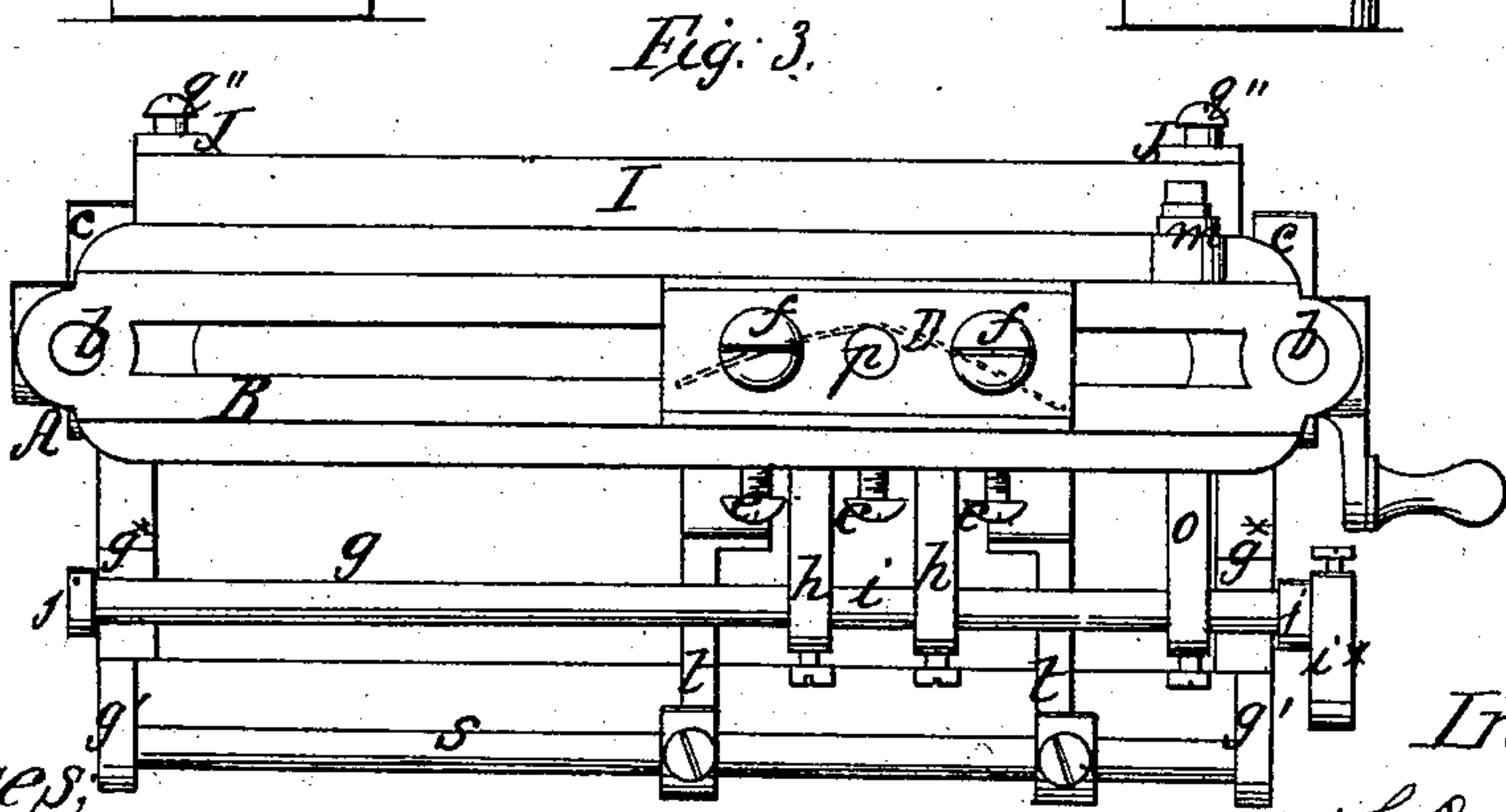
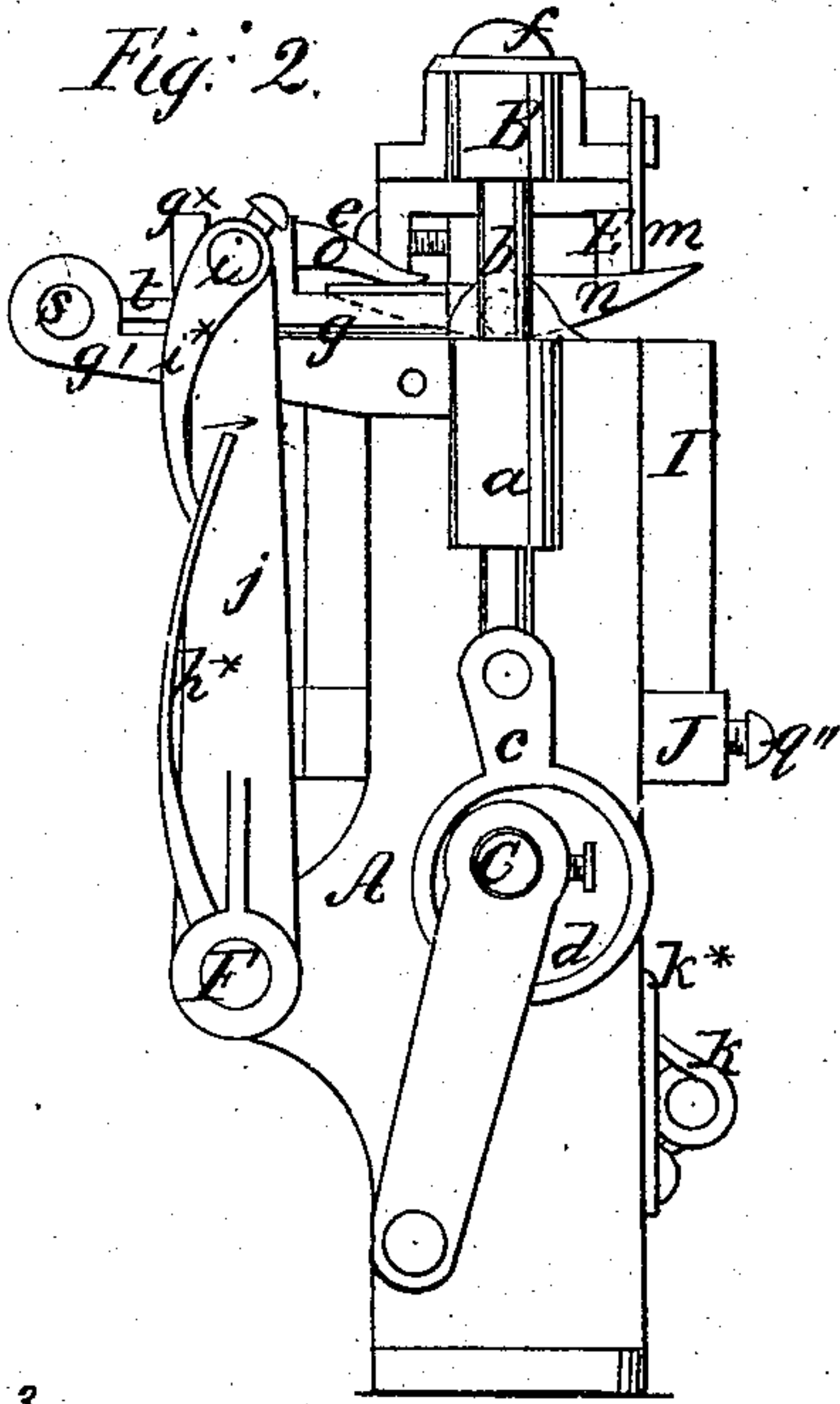
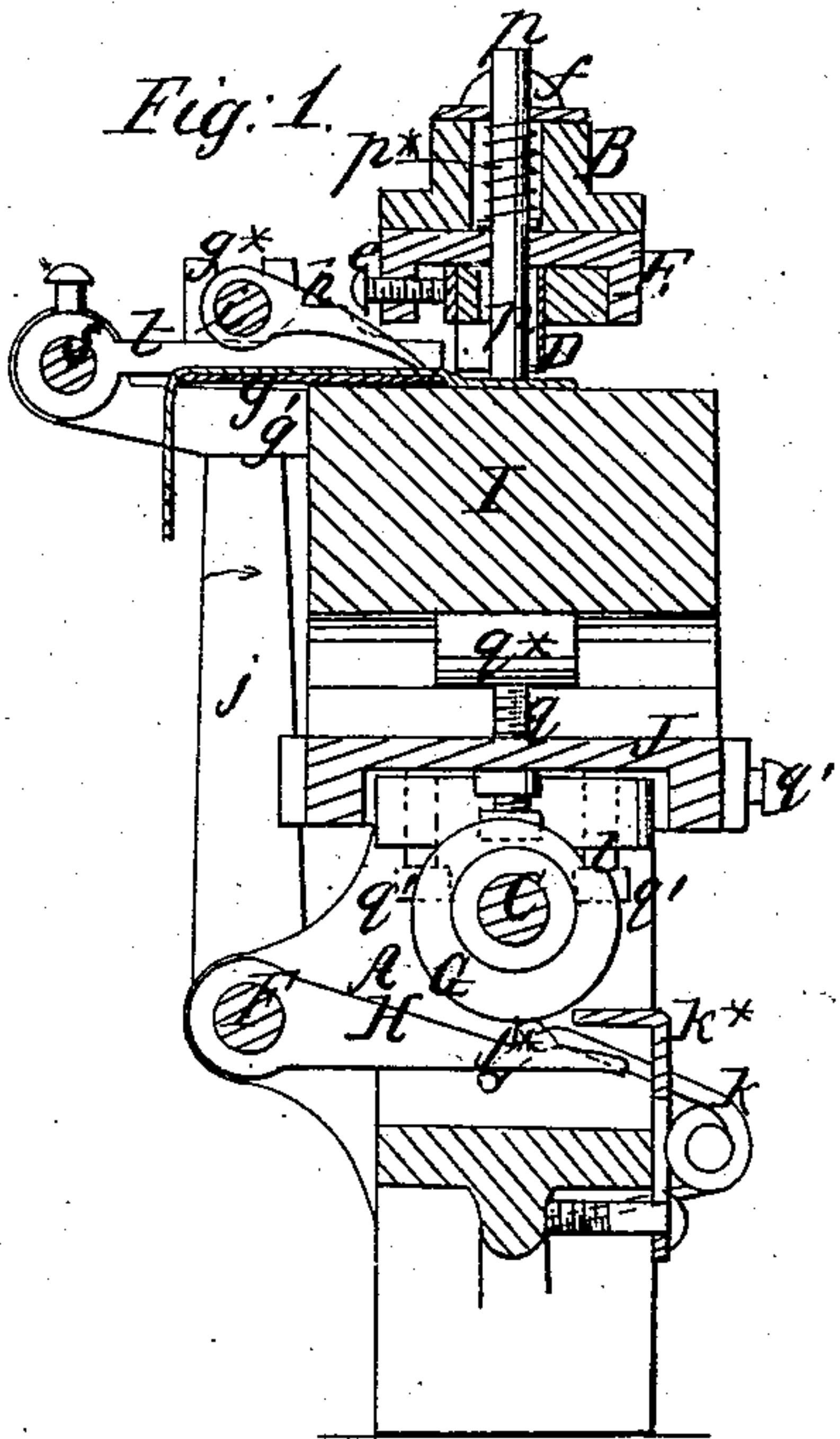


S.D. Tripp,
Cutting Leather,

N^o 43,050.

Patented June 7, 1864



Witnesses;

Two Combs
G. Reed

Inventor;

S D Tripp
per Mann
Atty

UNITED STATES PATENT OFFICE.

SETH D. TRIPP, OF LYNN, MASSACHUSETTS.

MACHINE FOR CUTTING AND EMBOSSING LEATHER.

Specification forming part of Letters Patent No. 43,050, dated June 7, 1864.

To all whom it may concern:

Be it known that I, SETH D. TRIPP, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and Improved Machine for Cutting and Embossing Leather; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a transverse vertical section of my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a plan or top view of the same.

Similar letters of reference in the three views indicate corresponding parts.

This invention relates to a machine intended to cut rectilinear or curved slips of leather, paper, cardboard, muslin, or other similar material of a uniform size, or to emboss such material at regular intervals, or to cut and emboss it simultaneously by the action of a rising-and-falling head carrying the cutter or die, or both, in combination with a vertically adjustable bed and reciprocating self-acting feed apparatus.

The peculiar construction of my machine and its advantages will be readily understood from the following description:

A represents a frame, made of cast-iron or other suitable material, and provided on its ends with lugs *a*, that are perforated to form the guides for the rods *b*. The upper ends of these rods are firmly secured to the head B, which carries the cutter or embossing-die, and their lower ends are hinged to straps *c*, which embrace the eccentric disks *d*. These eccentrics are firmly secured to the driving-shaft C and by their action a reciprocating rising-and-falling motion is imparted to the head B.

D is the cutter, which may be curved or rectilinear, according to the work to be cut, and said cutter is secured by means of set-screws *e* in a box, E, that is secured in the head B by screws *f*, or in any other desirable manner. By releasing the screws *f* a lateral motion can be imparted to the box E with the cutter, or said box may be removed and replaced by another of different size.

Instead of a cutter, an embossing-die might be inserted in the head B, or, if desired, both

the cutting and embossing tools might be used simultaneously in the same head.

The material to be cut or embossed is fed automatically and regularly to the cutter or die by the action of the feed mechanism, which consists of a small table, *g*, on which the material is held down by fingers *h*. These fingers are secured to a rock-shaft, *i*, which passes through boxes *g**, secured to the ends of the table *g*, and they are pressed down upon the material by the action of a spring, *h**, acting on a cam, *i**, which is firmly secured to one end of the rock-shaft *i*. This rock-shaft has its bearings in the upper ends of arms *j*, which are secured at their lower ends to a shaft, F, that receives an intermittent oscillating motion by the action of a cam, G, on a lever, H, which is secured to said shaft and pressed up against the circumference of the cam by a spring, *k*. The cam G is fastened to the driving-shaft C, and as the same rotates the loose end of the lever H is depressed, causing the arms *j* to swing in the direction of the arrow marked thereon in Figs. 1 and 2, and thereby the feed-table and rock-shaft *i*, together with the material, are moved toward the cutter or die in the head B. When the cam has rotated far enough to cause the shoulder V to pass the projection *j** of the lever H, said lever is suddenly raised by the action of the spring *k* and the feeding mechanism recedes, ready for a new move. The amount of motion of the lever H is regulated by the adjustable stop *k**, which is secured to the frame A, and by its action the feed motion can be increased or diminished at pleasure. In receding, the feeding mechanism releases the material, and at the same time the material is held firm and prevented from going back with the feed mechanism. This double object is effected by the following means: A tappet, *m*, is secured to the rising-and-falling head B, (see Fig. 2,) and as this head descends said tappet strikes a lever, *n*, which is pivoted to the frame A, and one arm of which bears under a finger, *a*, that is firmly secured to the rock-shaft *i*. As the tappet *m* strikes the lever *n* the finger *a* is raised and the rock-shaft *i* turns sufficiently far to cause the fingers *h* to release the material on the feed table *g*. Simultaneously with this operation the cut-

ting operation is effected and a pin, p , inserted in the head B , bears down upon the end of the material and holds it firmly until the feeding mechanism has receded. The pin p is held down by a spring, p^* , which allows the same to yield and to accommodate itself to the thickness of the material to be cut or embossed.

I is the platform or table which supports the material during the time the cutter or die take effect. This table is made of a thick block of wood, which is secured or adjusted in the frame A by means of screws q , which pull it down, and by screws q' , which push it up. The nuts q^* of the screws q are formed by round pieces of iron inserted into corresponding holes bored transversely through said block and cut out to make room for the screws, as clearly shown in Fig. 1, and the set-screws q bear against a cast-iron plate, J , which slides up and down between the uprights of the frame A , and is fastened in the desired position by set-screws q'' . By these means the surface of the block or table I can always be adjusted to conform perfectly to the cutting-edge of the cutter or to the working-face of the die. The feed-table g rests upon two arms, g' , which extend from the frame A , and which form the bearings for a rod, s . This rod forms the guide for two gages, t , that are set to correspond to the width of the material to be cut or embossed, and serve to conduct such material in the proper position over the feed-table. By these means material of any desired width can be passed through the machine and cut or embossed uniformly and evenly, and if the machine is

once properly set it requires little or no attention until it has to be changed for work of a different nature.

What I claim as new, and desire to secure by Letters Patent, is—

1. The adjustable block or table I , in combination with the rising-and-falling head B , and with the automatic feed mechanism, constructed and operating substantially in the manner and for the purpose shown and described.

2. The adjustable box E , in combination with the head B , cutter or die D , and table I , constructed and operating substantially as and for the purpose set forth.

3. The table g and fingers h , in combination with the arms j , lever H , cam G , and adjustable stop k^* , constructed and operating substantially as and for the purpose specified.

4. The tappet m , lever a , and finger o , in combination with the cutter-head B , table g , and fingers h , constructed and operating substantially as and for the purpose described.

5. The yielding pin p , in combination with the feed mechanism, and with the mechanism for releasing the material from the fingers h , constructed and operating substantially as and for the purpose specified.

6. The adjustable plate J , in combination with the frame A , block I , and screws q q' q'' , constructed and operating substantially as and for the purpose set forth.

SETH D. TRIPP.

Witnesses:

H. H. FRENCH,
F. B. WEEKS.