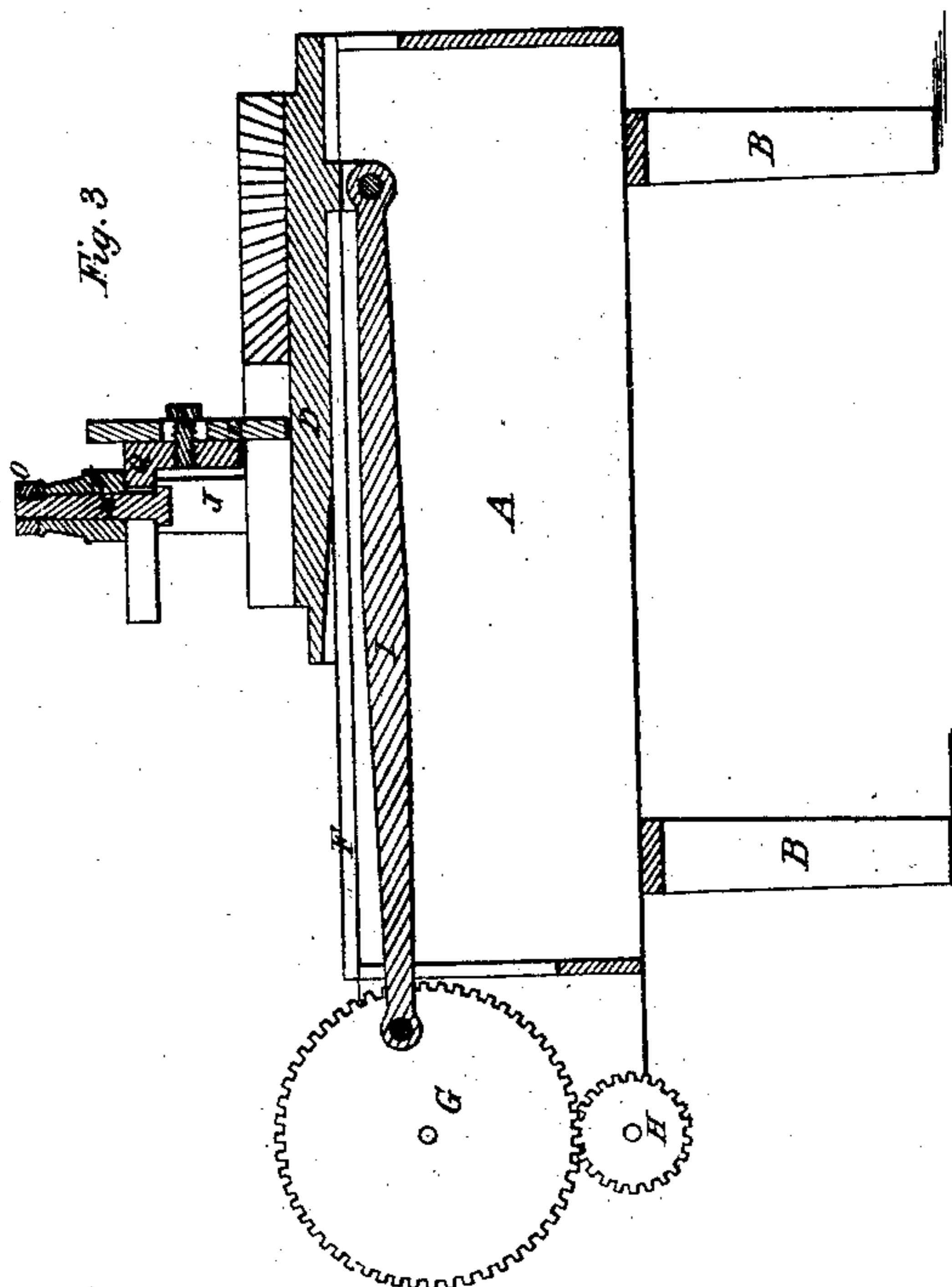
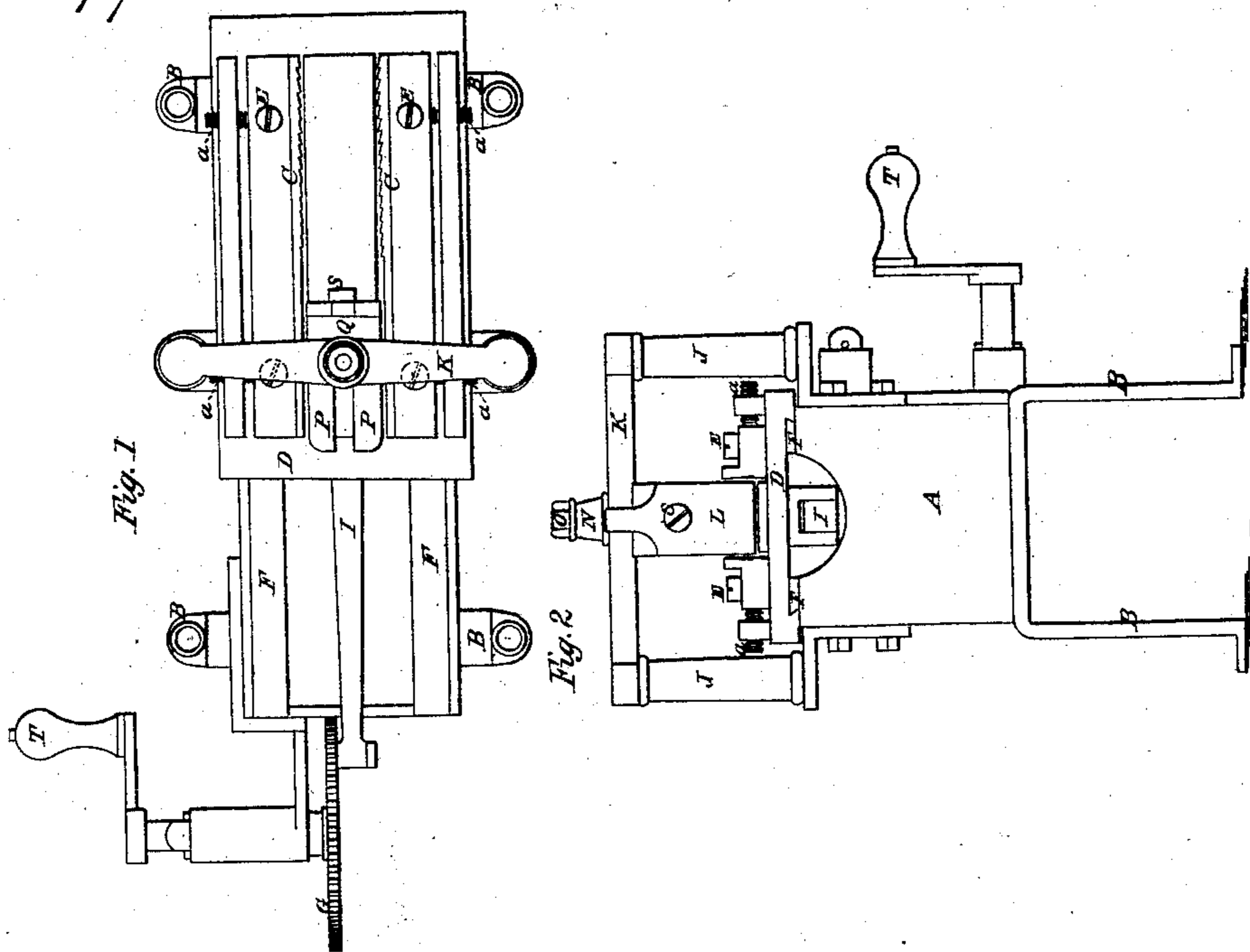


J. J. Crooke,

Making Hinges,

N^o 62,479.

Patented Feb. 26, 1867.



Witnesses:

H. Wickham Rose,
R. H. Deaton

Inventor:

John J. Crooke
By How & Weston,
Attys

United States Patent Office.

JOHN J. CROOKE, OF NEW YORK, N. Y.

Letters Patent No. 62,479, dated February 26, 1867.

IMPROVED MACHINE FOR FINISHING BUTT HINGES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Specifications of certain improvements in Machinery for Finishing Butt Hinges, &c., invented by JOHN J. CROOKE, of the city, county, and State of New York.

The object of my invention is to dress or finish the edges of butt hinges and other similar articles by filing or cutting them to a certain size and leaving their edges true and smooth. It consists, first, of two files or sets of cutters, between which the hinges are fed or moved by means of suitable mechanism, or by which the said hinge is filed or cut while it is held by suitable devices; second, of the combination with the said files of a sliding bed-piece, to which they are fastened in such a manner that they may be adjusted to suit different widths or lengths of hinges, and a stationary adjustable stop between said files, which holds the hinge while the files operate on it, substantially as set forth. In the accompanying drawings—

Figure 1 is a plan of my machine.

Figure 2 is an end view, showing the end which is towards the right in fig. 1.

Figure 3 is a central vertical section of the machine from end to end.

A is the bed or frame of the machine, which is supported on legs B B. C C are the files, which are so constructed that their teeth, if extended downward without change of direction, would all meet at a common centre, as in fig. 3. This centre should be in rear of the centre of the file, in order to give a proper inclination to the teeth at each end. The object of thus forming the files is that the teeth which first come in contact with the article to be operated upon may be considerably inclined towards the front of the file and the line of motion; and that each tooth in succession, commencing at the front end of the file, may be less and less inclined until a point is reached at a distance from said front end equal to about three-fourths of the length of the cutting part of the file, at which point the teeth are perpendicular to the line of motion. From this point to the rear end of the file they become, gradually, more sloping in the opposite direction, or towards the rear end of the file. Absolute accuracy in following this plan is not required; it is sufficient if the direction of the teeth conforms very nearly to that stated. The files C C are bolted to the slide or carriage D by bolts E E, which pass through slots in the files and are screwed into the carriage D. These slots in the files permit of an adjustment of the files to suit different widths and lengths of hinges. When the files are properly adjusted they are held in their places by the screws *a a a*. The carriage D is driven on the ways F F by means of the gearing G and H, and connecting-rod I, or it may be driven by any other suitable devices. On the pillars or supports J J is supported a cross-piece, K, to which the adjustable stationary stop L is secured, as clearly seen in fig. 3. The bolt M passes up through the centre piece N, and is tightened by the nut O. The head of this bolt rests against the two forks P P, and thus holds the piece Q firmly against the bar or cross-piece K. To the seat or piece Q the stop L is secured by the bolt S, which passes through a slot in the stop L, and allows a vertical adjustment of said stop, while the bolt M and slot between the forks P P admits of longitudinal adjustment. In the drawings the machine is represented as driven by a crank, T, but in practice the more usual devices for driving machinery should be used. A set of files of a circular form may be used to trim up the knuckle of the hinge if desired. A file for this purpose should have its teeth cut in a spiral form on the inner surface of its cylindrical face.

Having thus fully described my invention, I claim—

1. The files C C, constructed substantially as described.
2. The combination with the files C C of the sliding bed-piece or carriage D, and stop L, substantially as and for the purpose set forth.

JOHN J. CROOKE.

Witnesses:

H. JAMES WESTON,

R. H. SEATON.