

(No Model.)

J. B. SARGENT.
WHIFFLETREE.

No. 583,337.

Patented May 25, 1897.

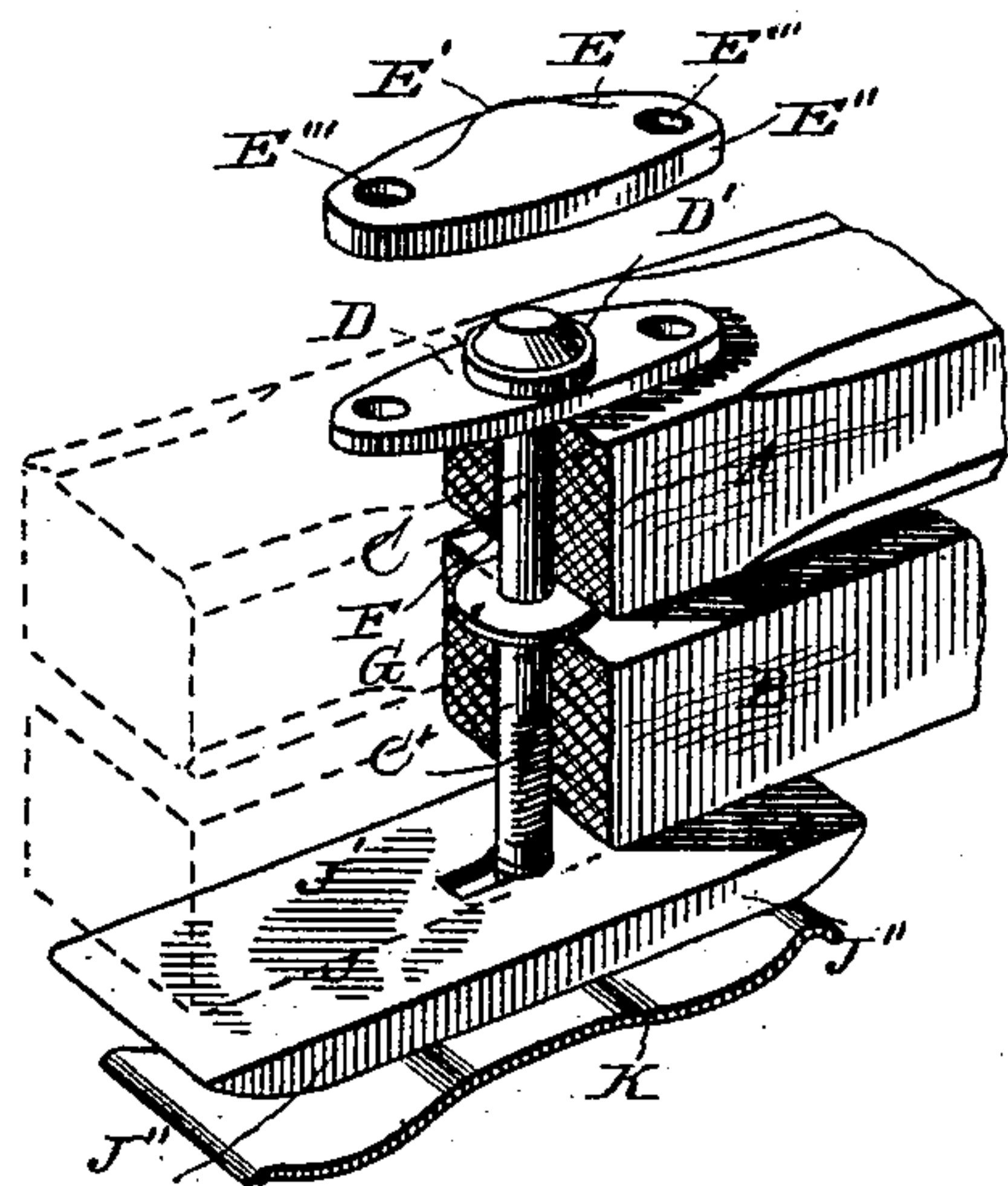


Fig. 1.

Fig. 2.

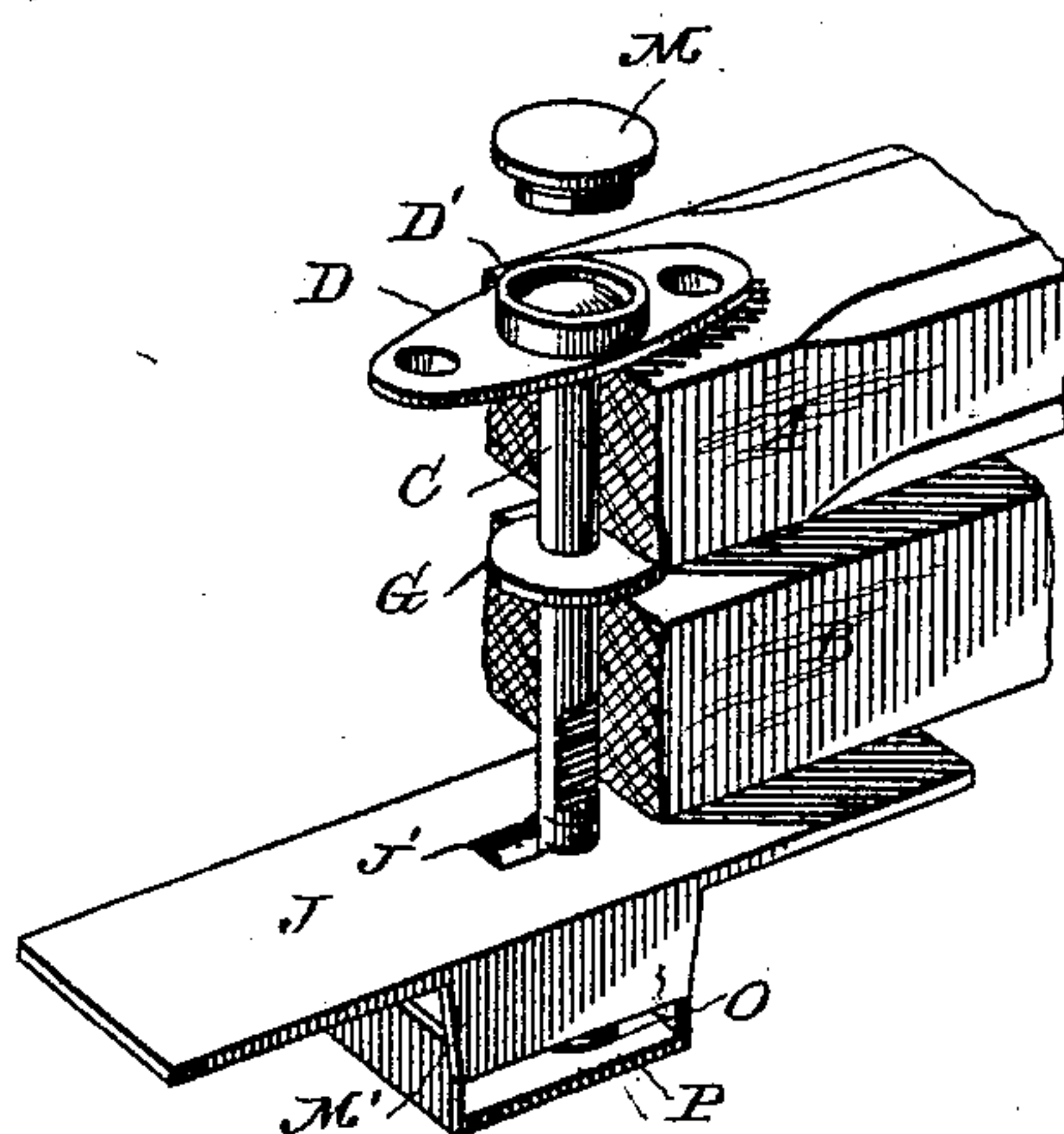


Fig. 3.

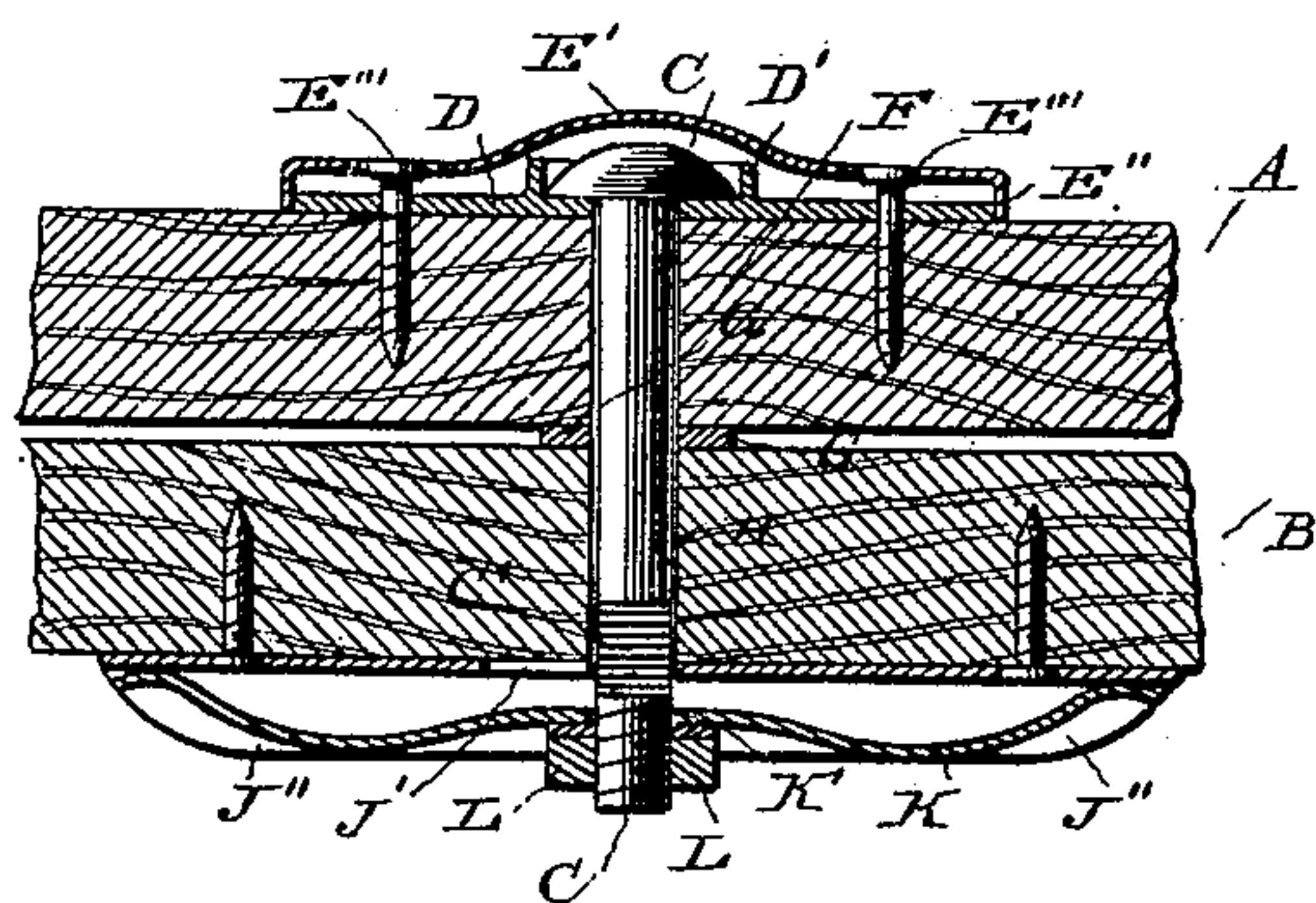
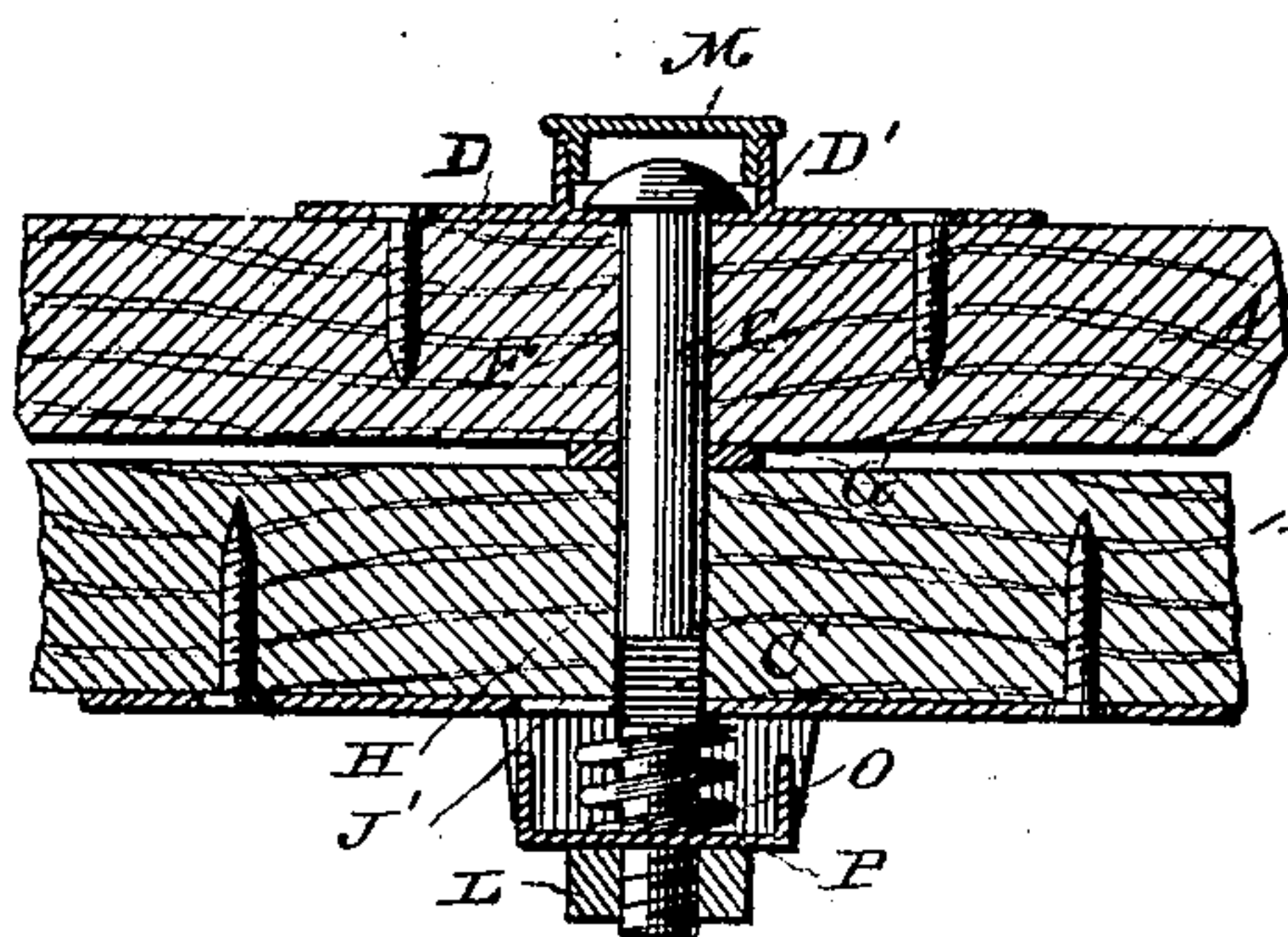


Fig. 4.



WITNESSES:

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WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 583,337, dated May 25, 1897.

Application filed February 19, 1897. Serial No. 624,207. (No model.)

To all whom it may concern:

Be it known that I, JUSTIN B. SARGENT, a citizen of the United States, residing at West Lebanon, in the county of Grafton and State of New Hampshire, have invented certain new and useful Improvements in Whiffletrees; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in whiffletrees; and the main object of my invention is the provision of means of connecting the tree to the shaft cross-bar which will prevent rattling, which will take up the constant wear, and which has means whereby the nut on the bolt will not work loose, and a cup to be placed over the head of the bolt to keep the dust out and to make it easy to lubricate, thus producing a connection which is simple, durable, and cheap, and also a very practical device for the intended purpose.

To attain the desired objects, the invention consists of a whiffletree connection embodying novel features of construction and combination of parts, substantially as disclosed herein.

Figure 1 represents a perspective view of the parts detached in regular order. Fig. 2 represents a longitudinal central sectional view of a part of the whiffletree, showing more clearly the device when in operative position. Fig. 3 is a similar view to Fig. 1 of a modified form of my invention, and Fig. 4 is a similar view to Fig. 2 of the said modification.

In the drawings, A designates the whiffletree, which is connected to the cross-bar B by means of the bolt C, which has part of its sides flattened, as at C', and whose head rests on the metal plate D, which has the seat D' for the bolt-head, and to cover this plate and bolt-head, so that the bolt may be easily lubricated and to keep out the dust after lubricating, I employ the dust cap or casing E, which consists of the central raised portion E' and the walls E'' and has openings E''', which are directly over openings in the plate D and through which pass screws to securely hold the cap and plate to the top of the whiffletree.

The bolt passes through the opening F in

the tree through the washer or bearing-plate G, between the tree and cross-bar, through the opening H in the cross-bar. On the bottom of the cross-bar I secure a plate J, which has the keyhole-shaped opening J' in order that the end of the bolt may be passed through the enlarged portion until the plate is flush with the cross-bar when the plate is slid to one side, so that the narrow portion of the opening J' passes around the flattened part of the bolt, so that the end of the bolt is in such a position as not to be allowed to draw out of this plate. The convoluted spring K is then placed over the end of the bolt, which passes through the opening K' in the spring, which is held down by the nut L, and thus it will be seen that the spring exerts a tension against the nut and keeps the whiffletree from rattling, as it takes up all looseness and prevents the nut from working loose, and the spring is kept by the walls or bent-up sides J'' of the plate J from any side movement.

In Figs. 3 and 4 I show a modified form of connecting device which has in place of the dust-cap E a circular cap M, which is threaded and fits the seat D' of the plate D, whose interior is threaded; and instead of the walls or sides J'' of the plate J being bent up the full length of the plate they are short, as the sides M', and between which and over the bolt fits the coiled spring O, which answers the same purpose as the other convoluted spring, but which has the dust-case P, which fits in between the short sides of the plate and acts as a bearing-surface for the nut.

From the foregoing description, taken in connection with the drawings, it will be seen that I provide a connecting device for the purpose named which will prevent noise or rattling of the whiffletree, keep the nut on the bolt from getting loose, and which will make allowances for all wear and tear and which can easily be lubricated by removing the dust-cap, which will keep out dust, and a device which is extremely simple, durable, and inexpensive, as well as practical and useful.

I claim—

1. The combination with the cross-bar and whiffletree, of the bolt passing through the same, and having its sides flattened, a plate adapted to fit around the bolt to prevent its being turned or withdrawn, and a spring act-

ing on the bolt to prevent the parts from rattling or working loose to lock the nut on said bolt.

2. The combination with the cross-bar and
5 whiffletree, of the noiseless connecting device, consisting of the bolt having a part of its sides flattened and having a seat for and dust-cap over its head, the plate surrounding the bolt to hold the same from upward movement
10 and prevent the bolt from turning, and means to hold the bolt in place and lock the nut from movement.

3. In combination with the cross-bar and whiffletree, the connecting means, consisting
15 of the bolt passing therethrough, the plate

carrying the seat for the head of the bolt and having a dust-cap fitting thereon to secure it to the whiffletree, the plate surrounding the bolt adapted to hold it against being turned or withdrawn and having the long bent-up
20 edges, and the convoluted flat spring surrounding the bolt end and having the nut and bent-up sides of the plate to keep it from upward and turning movements.

In testimony whereof I affix my signature
25 in presence of two witnesses.

JUSTIN B. SARGENT.

Witnesses:

FLORENCE E. SARGENT,
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