

No. 702,341.

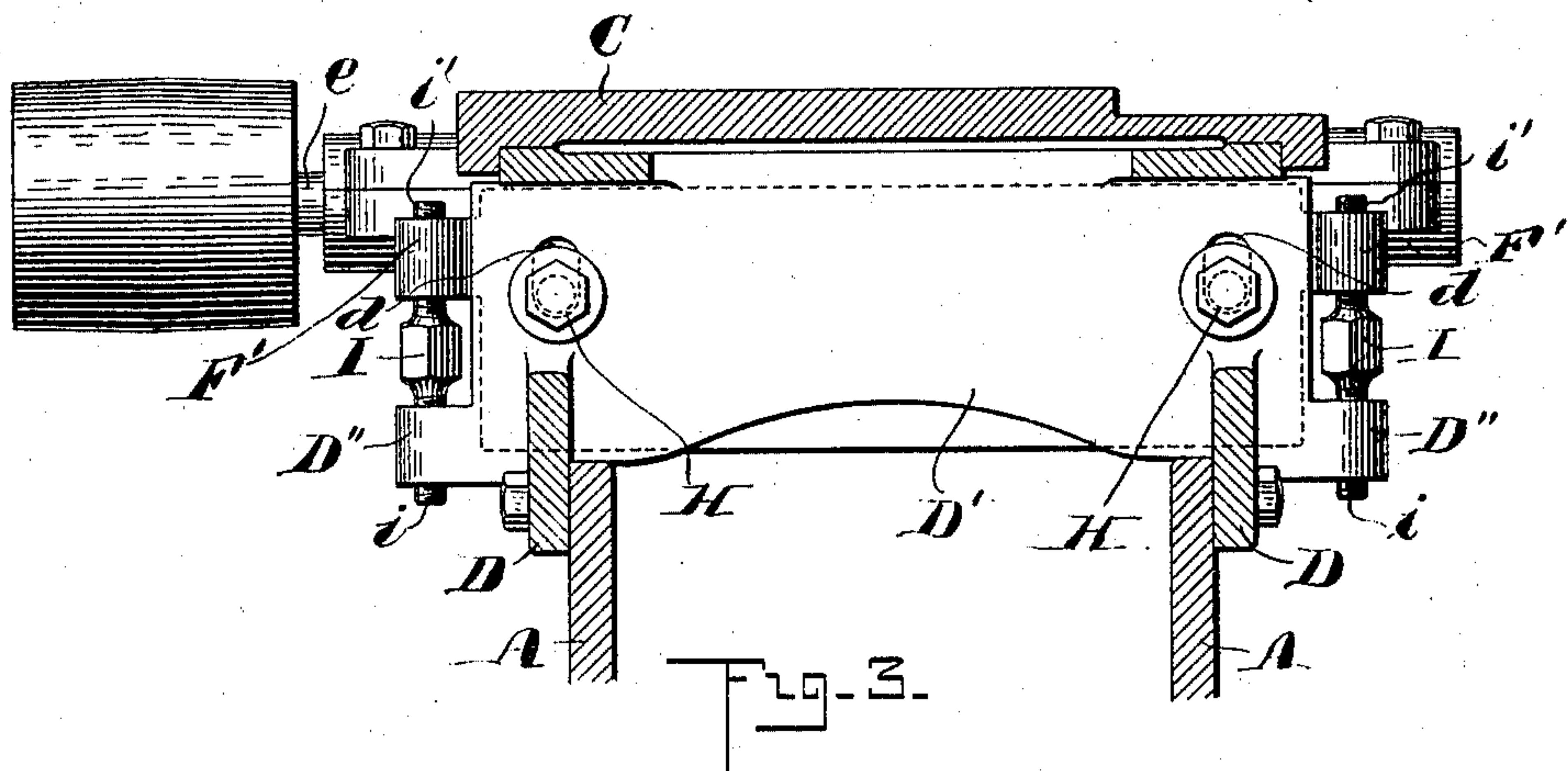
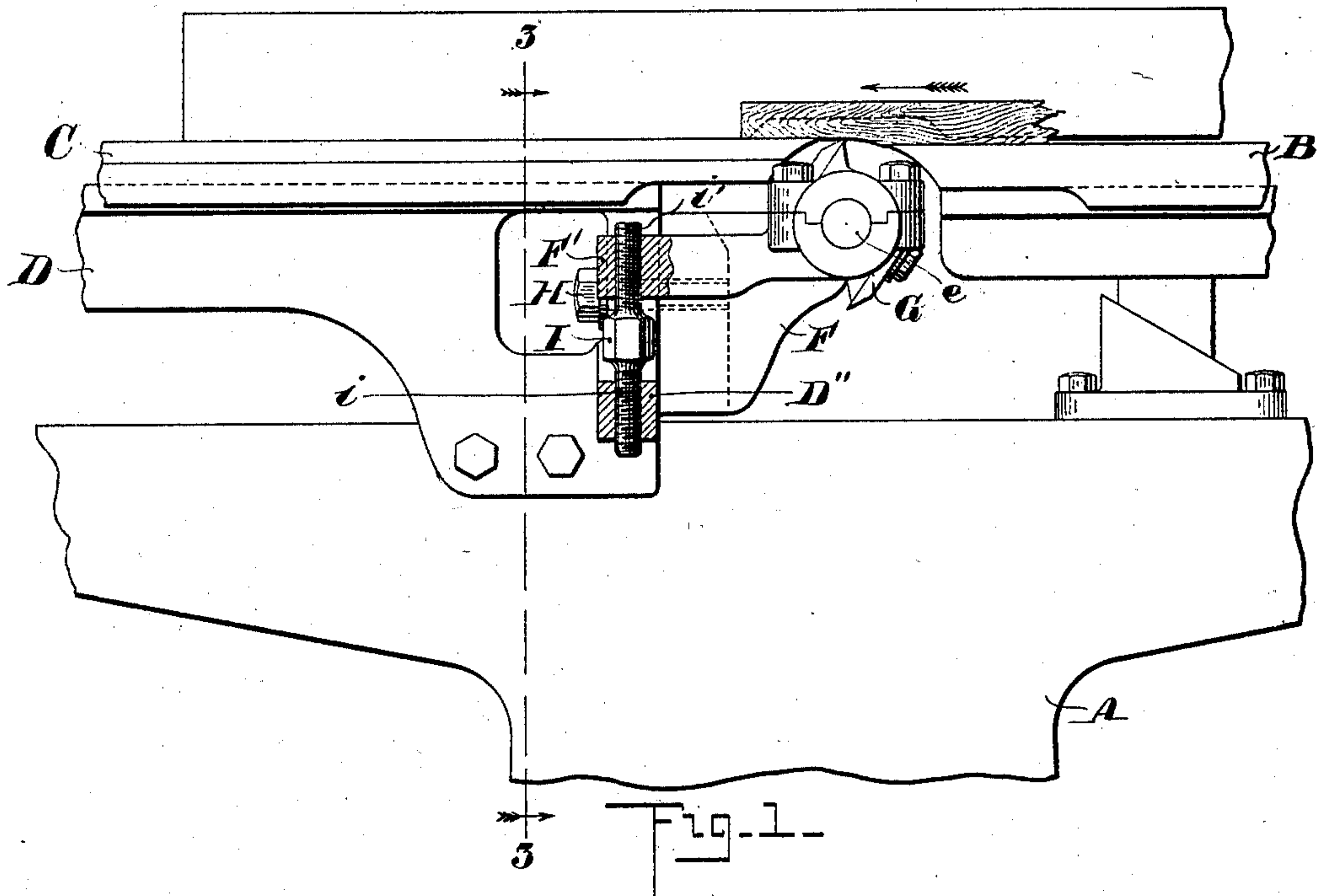
Patented June 10, 1902.

W. W. CAREY.
PLANING MACHINE.

(Application filed Dec. 17, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses=
Charles F. Logan,
Sydney Harris

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Wilson W. Carey.
by *Alban Andrieu*
his Atty.

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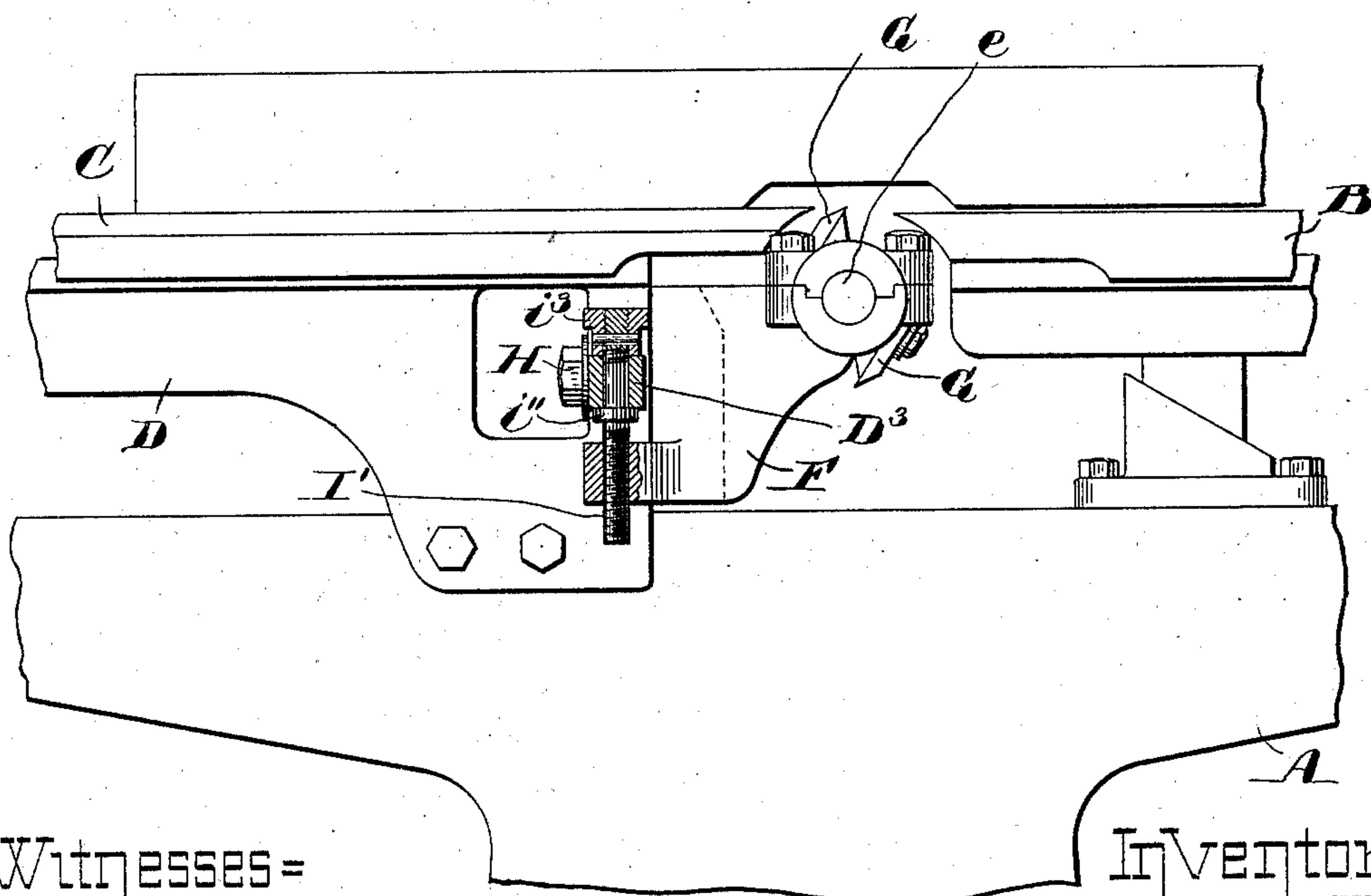
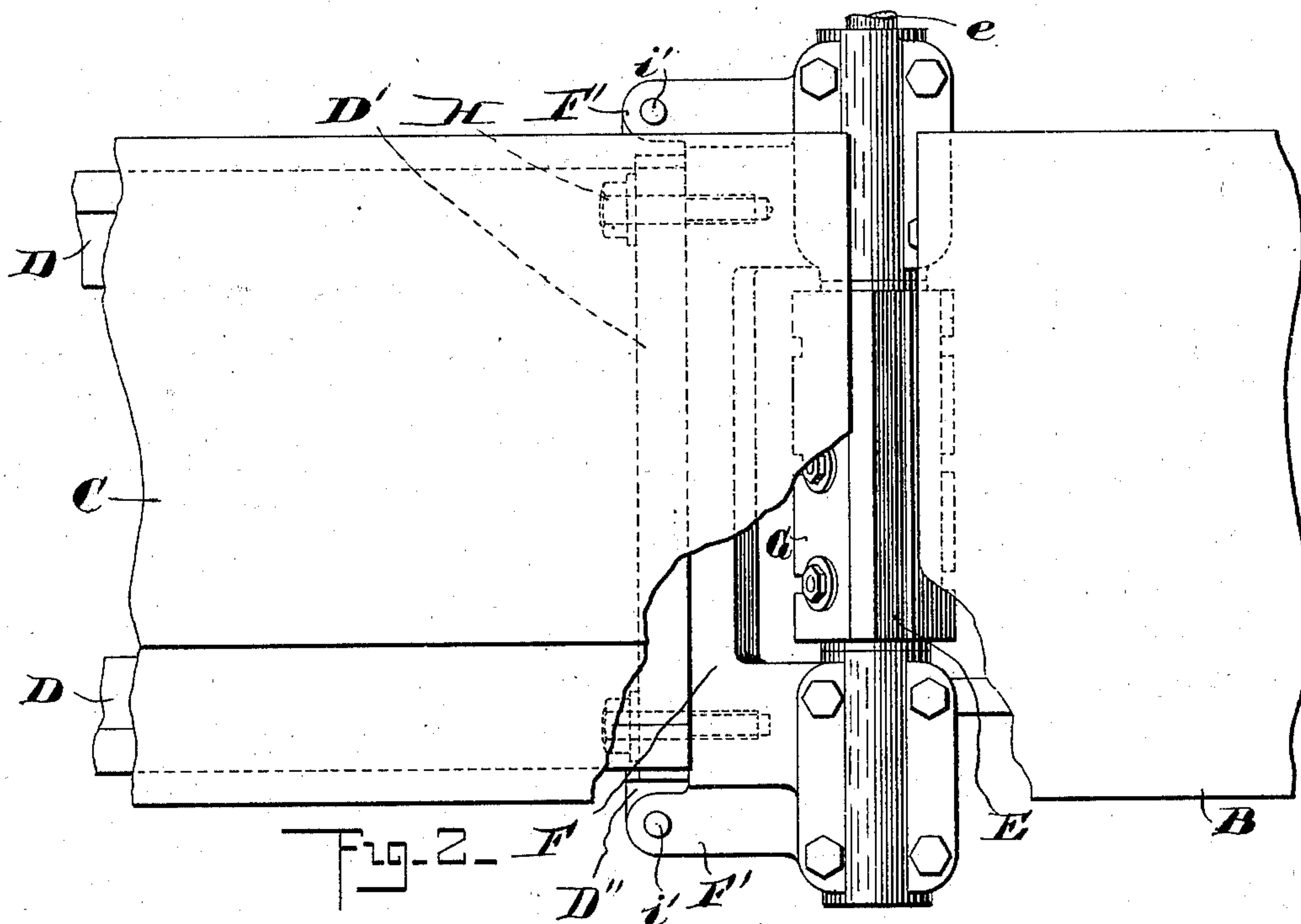
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Fig. 4.

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UNITED STATES PATENT OFFICE.

WILSON W. CAREY, OF LOWELL, MASSACHUSETTS.

PLANING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 702,341, dated June 10, 1902.

Application filed December 17, 1901. Serial No. 86,231. (No model.)

To all whom it may concern:

Be it known that I, WILSON W. CAREY, a citizen of the United States, and a resident of Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Buzz or Hand Planing-Machines, of which the following is a specification.

This invention relates to improvements in buzz or hand planing-machines; and it consists in mechanism for vertically adjusting the rotary knife-cylinder relative to the upper surface of the back table in such a manner as to cause the cutting edges of the rotary knives when in their highest position to be in horizontal alinement with the upper surface of the back table, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein—

Figure 1 is a partial side elevation of a buzz or hand planer provided with my improved knife-cylinder-adjusting device. Fig. 2 is a top plan view of Fig. 1. Fig. 3 is a cross-section on the line 3 3 shown in Fig. 1; and Fig. 4 is a side elevation similar to Fig. 1, showing a modification of the invention.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

A represents the standard of a buzz or hand planer.

B represents the vertically-adjustable front table, and C represents the back table longitudinally adjustable upon the frame D, that is secured to the said standard, as is usual in machines of this kind.

E is the rotary knife-cylinder, the cylindrical ends *ee* of which are journaled in bearings attached to the vertically-adjustable head-stock F, as usual in machines of this kind.

G G are the cutter-knives, secured to the rotary knife-cylinder, as usual.

The frame D terminates at its forward end as a cross-beam D', against which the head-stock F is secured after being adjusted by means of headed screw-bolts H H, which after passing loosely through vertical slots *dd* in the lateral beam D' are screwed into the head-stock F, as shown. Integral with the ends of the frame D are made ears D'' D'', and above the same are made on the ends of the

head-stock F corresponding ears F' F', as shown in Figs. 1, 2, and 3.

I is a preferably polygonal head of a screw-bolt, the ends *i i'* of which are screw-threaded in opposite directions—that is, one is made with a right-hand thread and the other with a left-hand thread, as shown in Figs. 1 and 3. The said screw-threaded ends of the bolt are screwed into corresponding screw-threaded perforations in the ears D'' and F', respectively. There is one of such adjusting devices in either end of the head-stock, as shown in Figs. 2 and 3. If it is desired to adjust the knife-cylinder to its proper height relative to the top of the back table C, it is only necessary to turn the adjusting-screws I I to the right or left, as required, thereby causing the head-stock and its attachments to be raised or lowered for the proper adjustment of the cutting-knives relative to the top of the back table C. After being so adjusted the head-stock may be securely clamped in its adjusted position by tightening the screws H H.

Although in practice I prefer to employ adjusting-bolts screw-threaded in both ends, one with a right and one with a left thread, I may, if so desired, use a modification, as shown in Fig. 4, in which the head-stock ear F' only is internally screw-threaded and adapted to receive a screw I', that is journaled in the stationary ear on the frame D, but prevented from moving longitudinally therein, it being for such purpose provided with a collar *i''* below the stationary ear D³ and with a polygonal head *i³* above said ear, as shown in Fig. 4, by which arrangement the head-stock and its attachments may readily be adjusted for the purpose hereinabove set forth. By this arrangement I am enabled to adjust the position of the knife-cylinder during the running of the machine without the need of stopping it, thus saving valuable time in the adjustment of the parts mentioned.

It will be seen that the cutter-carrying head-stock is of substantially yoke-shape form, the transverse portion thereof bearing flatwise against the framework of the machine and the arms of said head-stock constituting effective supports in which the journals of the cutter can rotate, and by reason of said flat bearing the head-stock when the holding-screws hereinbefore described are set is held

firmly against chattering. The said head-stock has lugs at its opposite ends in vertical alinement with coöperating lugs on the framework, and these lugs are connected by the
5 independently-operative adjusting means hereinbefore described, so that the said stock can be perfectly leveled by manipulating one or the other, or both, of the independent adjusting means and solidly held in its adjusted
10 position, the whole forming a simple and effective organization of parts.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

15 1. In a buzz or hand planing-machine, the combination of back and front tables, a cutter-carrying head-stock of yoke form, the transverse portion of which is adapted to bear flatwise against the framework of the
20 machine, and such framework having elongated vertical slots, screws adapted to pass through the respective slots, and the transverse portion of the head-stock having tapped seats to receive said screws, and said head-
25 stock having lugs at its opposite ends, and

the framework having coöperating lugs arranged in vertical alinement with the other lugs, and independent adjusting means connected with the respective lugs.

2. In a buzz or hand planing-machine, the 30 combination of back and front tables, a cutter-carrying head-stock of yoke form, the transverse portion of which is adapted to bear flatwise against the framework of the machine, and such framework having elongated 35 vertical slots, screws adapted to pass through the respective slots, and the transverse portion of the head-stock having tapped seats to receive said screws, and said head-stock having lugs arranged in vertical alinement 40 with the other lugs, and right and left handed adjusting-screws tapped into the respective lugs.

In testimony whereof I have affixed my signature in presence of two witnesses.

WILSON W. CAREY.

Witnesses:

ALBAN ANDRÉN,

CHARLES A. HARRIS.