

No. 773,754.

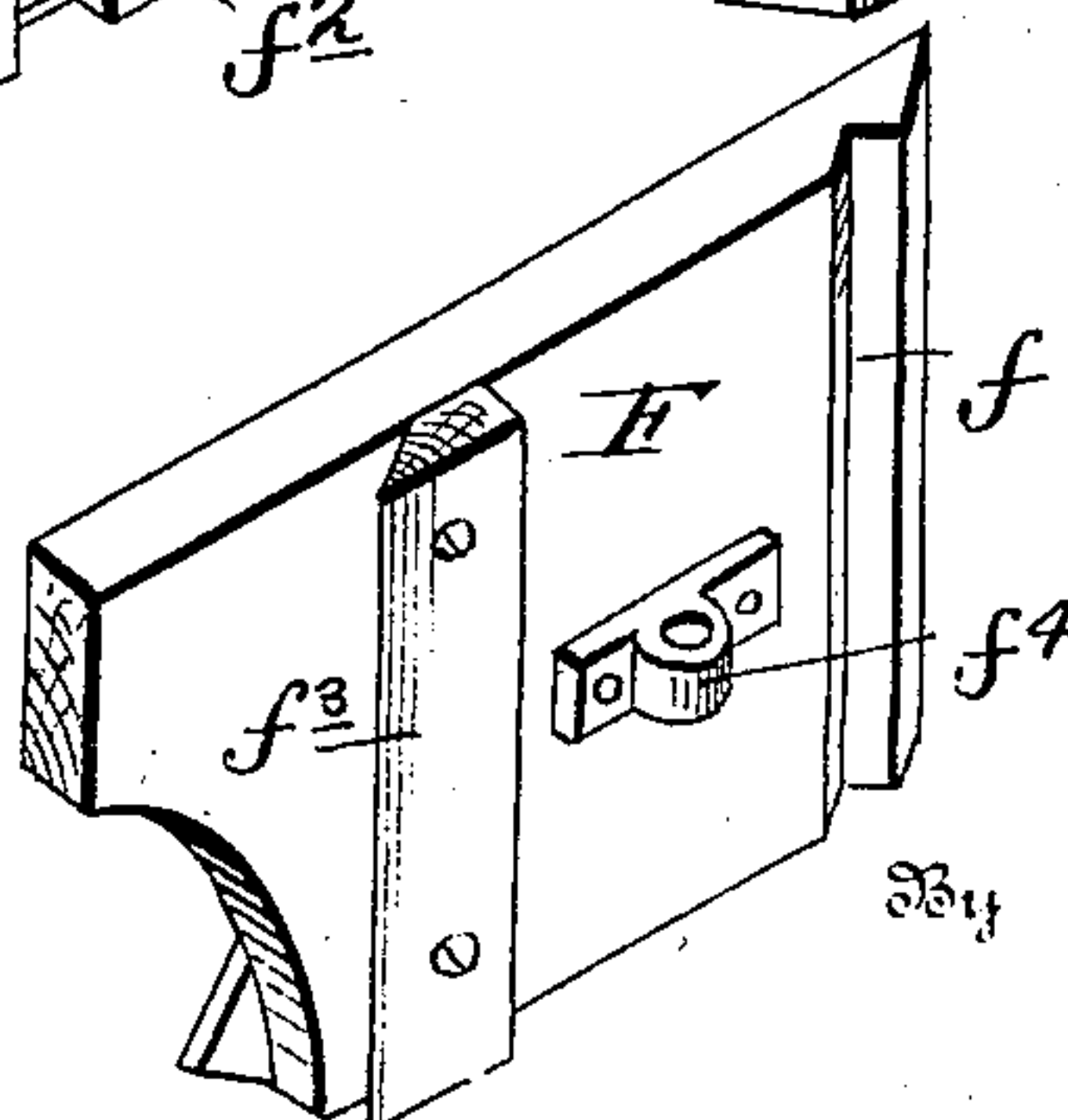
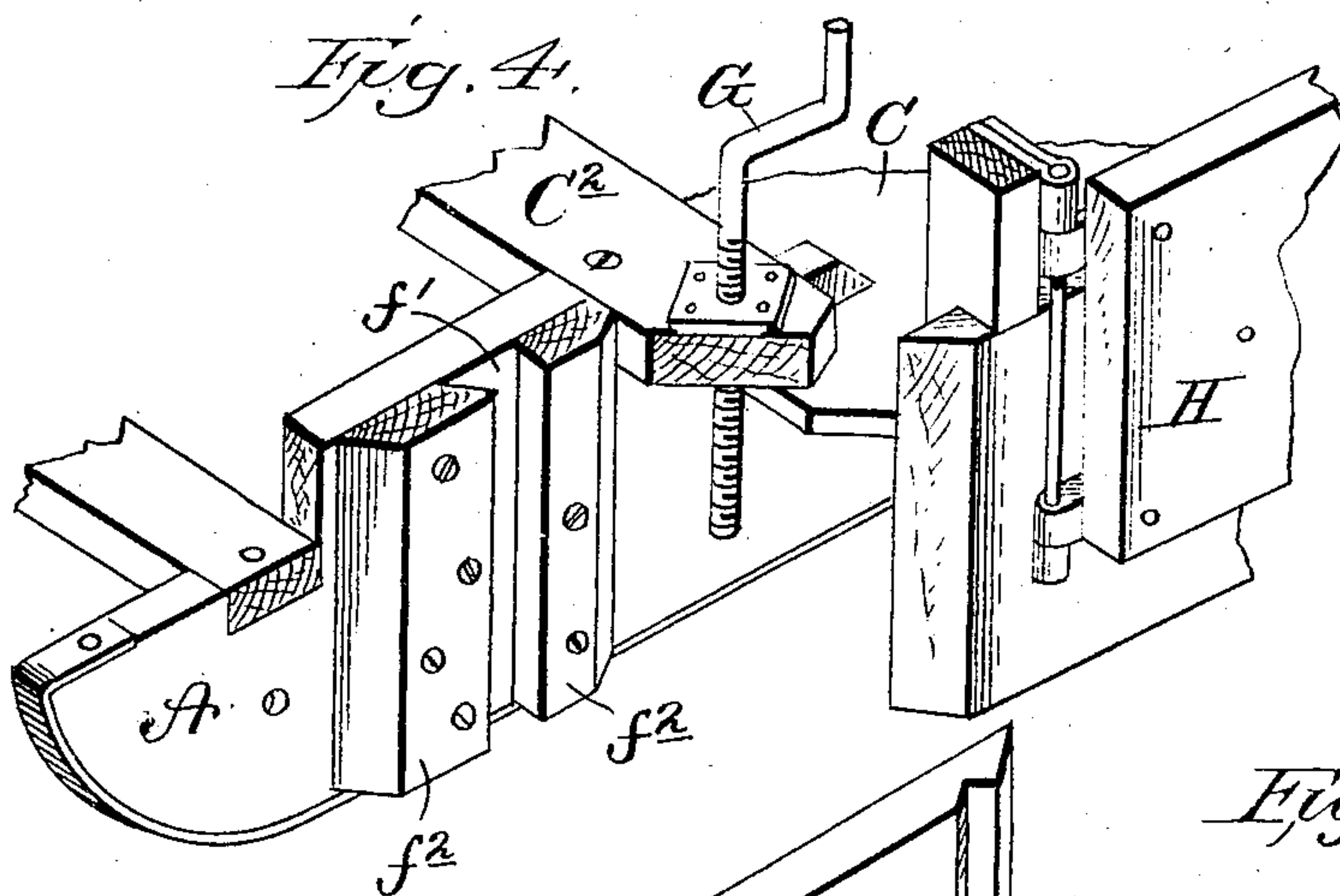
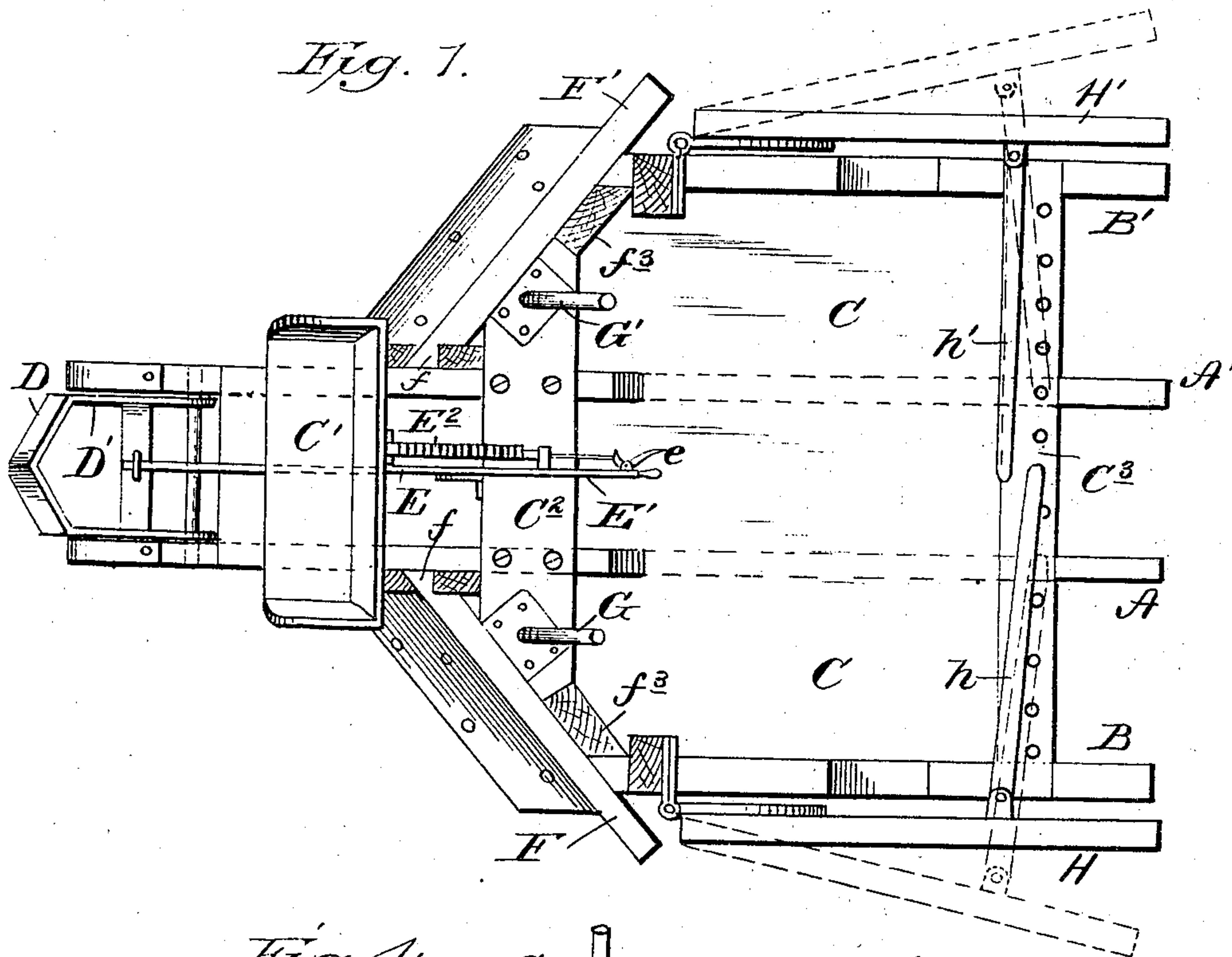
PATENTED NOV. 1, 1904.

F. G. KING.
SNOW PLOW AND ROAD MAKING MACHINE.

APPLICATION FILED MAY 6, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 2.

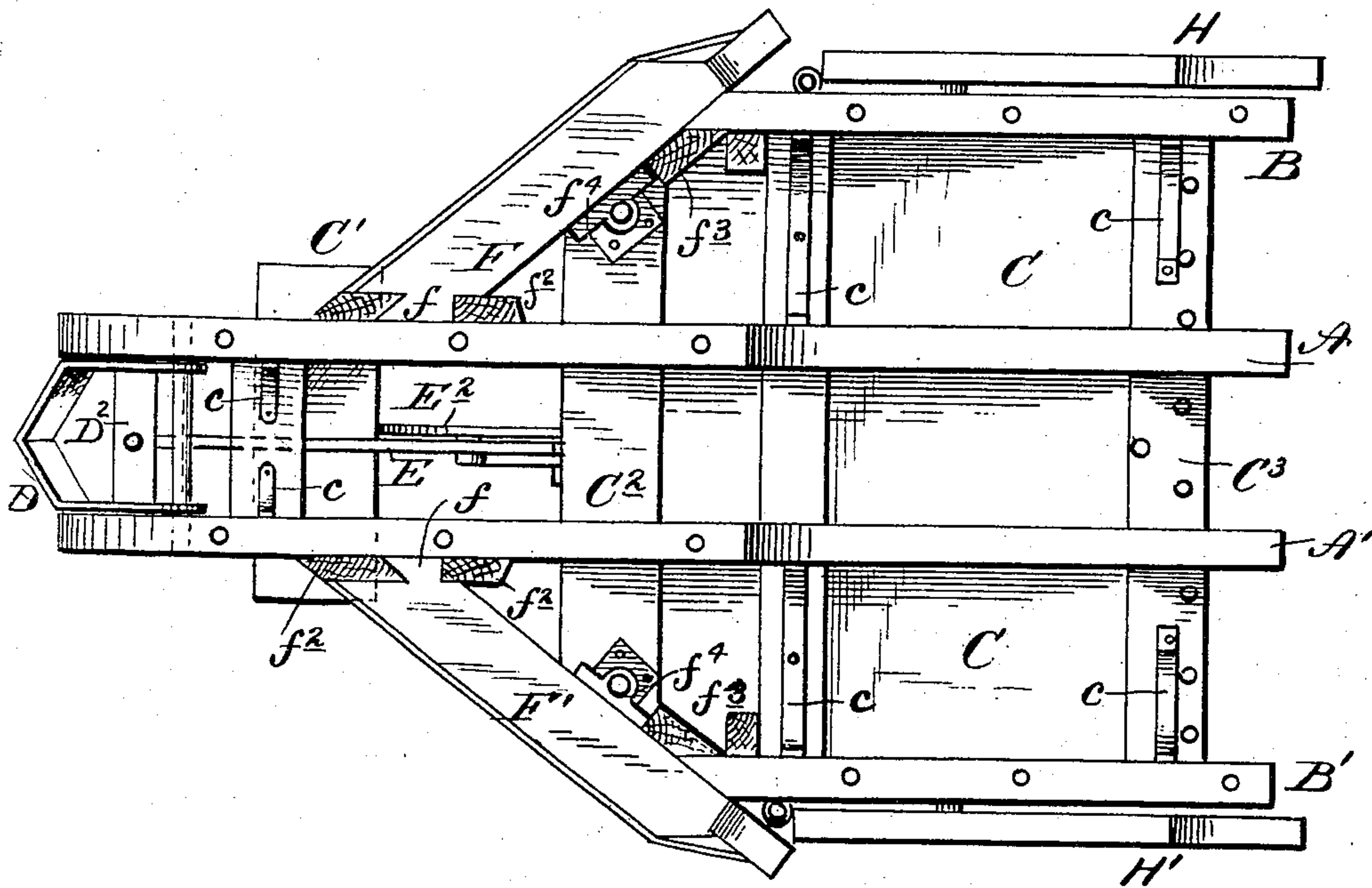
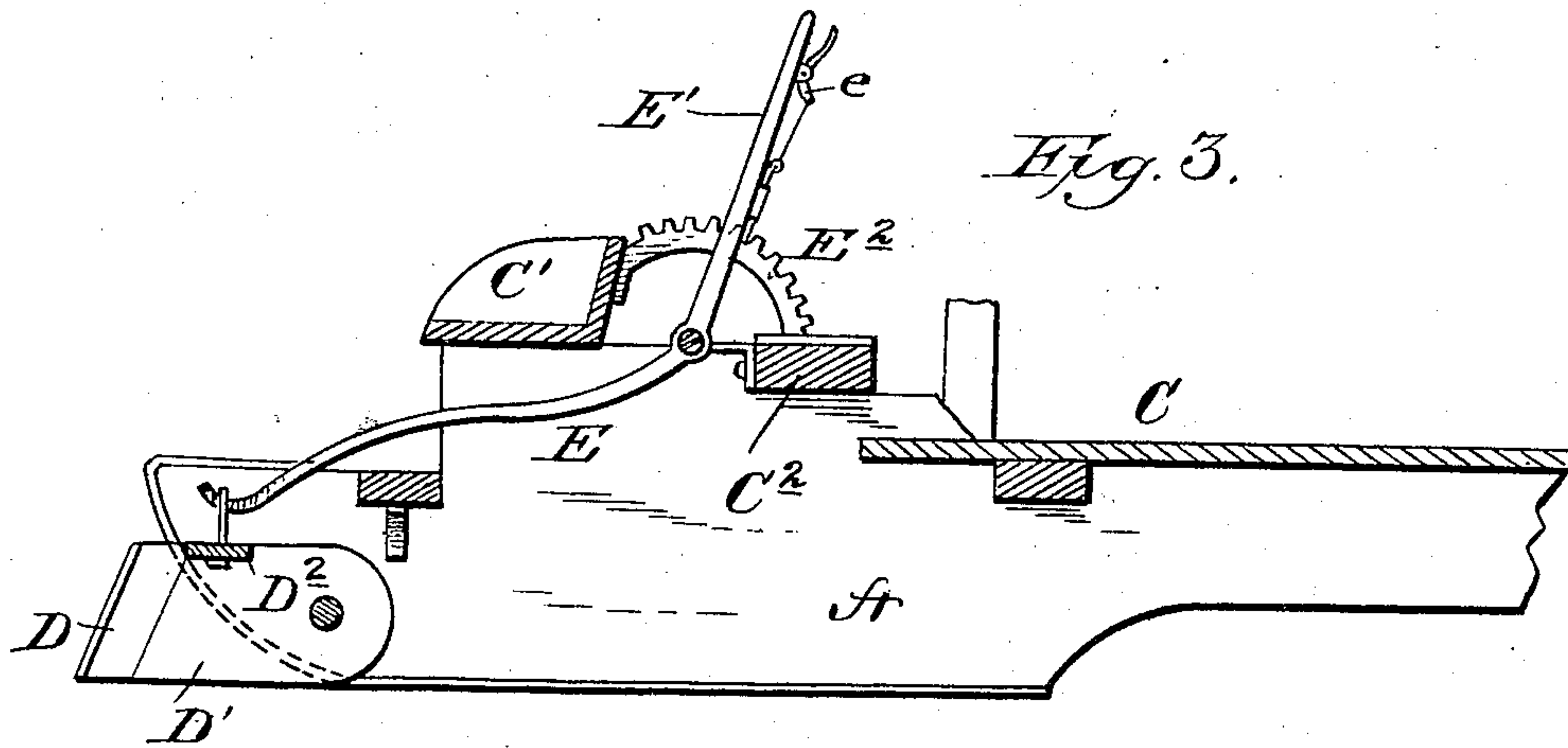


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRANK G. KING, OF INDIAN LAKE, NEW YORK.

SNOW-PLOW AND ROAD-MAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 773,754, dated November 1, 1904.

Application filed May 6, 1904. Serial No. 206,676. (No model.)

To all whom it may concern:

Be it known that I, FRANK G. KING, a citizen of the United States, residing at Indian Lake, in the county of Hamilton and State of New York, have invented new and useful Improvements in Snow-Plows and Road-Making Machines, of which the following is a specification.

My invention relates to improvements in that class of snow-plows or road-making machines which are designed more particularly for use in logging regions and wherein vertically-adjustable plows and laterally-adjustable side wings are employed in the manner and for the purposes to be hereinafter stated.

The object of my present invention is to provide an improved snow-plow of the class mentioned, one which will be strong and durable in all its parts, easy to manufacture, reliable and efficient in its operation, and capable of easy repair at the minimum of cost without employment of expensive parts and castings.

To these ends my improvements consist, essentially, of the novel details of construction and general arrangement of parts, as will be hereinafter fully described, and specifically designated in the claims.

In the accompanying drawings, Figure 1 represents a top plan view of my invention; Fig. 2, a bottom plan view of the same; Fig. 3, a detail view of the front plow and means for operating the same; Fig. 4, a detail perspective view of the guideways for the side moldboard, and Fig. 5 a detail perspective view of the moldboard proper.

Similar letters of reference occurring on the several figures of the drawings indicate corresponding parts.

In carrying out my invention the draft-frame or main body of the plow is composed of the two central runners A A' and the two side runners B B', one on each side of the central runners, as shown, and all of said runners being securely held in their respective positions by the platform C and a series of braces c to form a solid and rigid construction, as fully shown in Figs. 1 and 2.

Between the extreme front ends of the central runners A A' is arranged the central

plow having converging side boards D, the rear ends of the frame D', to which they are attached, being suitably pivoted on each side of the inner faces of the runners A A', as shown. The front end of this central plow is capable of being readily raised or lowered, according to the conditions of the work required, by means of the pivoted lever E, the lower end of which engages with a loop or ring on the cross-frame D² of the plow, and the upper end or handle-bar E' being provided with a sliding clutch e, the lower end of which engages with one of a series of notches in the segmental arm E² to hold said plow either in a raised or lowered position, as may be desired.

To the rear of the seat C', arranged above the central runners A A', is provided the diagonally-located moldboards F F', one on each side of the central runners and projecting from thence to and slightly beyond the side runners B B', as fully shown in Figs. 1 and 2. The inner vertical edge of each of these moldboards F F' is formed in the shape of a wedge or tenon f, which is adapted to engage with a correspondingly-shaped recess or mortise f', preferably formed by the vertical strips f², upon the outer sides of the central runners A A', while a similar wedge-shaped strip f³ is secured to the moldboards near their outer ends (more fully shown in Fig. 5) and adapted to engage with the front vertical walls of the side runners B B' to provide a simple and reliable channel wherein the said moldboards are capable of vertical adjustment or movement for the various requirements of road-making, as also to permit of the raising of said moldboards, with their plows or scrapers, during the transportation of the machine from one place to another.

Suitable screw-rods G G' have their bearings in plates secured to the cross-frame C², the lower ends of said screw-rods engaging a correspondingly-threaded lug f⁴ on each of the moldboards, and are employed to raise or lower said moldboards by means of the handles on said screw-rods, as fully shown in Figs. 4 and 5.

Suitably hinged to the side runners B B' and to the rear of the moldboards F F' are

provided the laterally-adjustable wings H H', which are capable of easy adjustment by means of the pivoted rods h h', the inner bent ends of which engage with one of a series of
5 holes formed in the cross-beam C³, as fully shown in Fig. 1.

It will thus be seen that by means of the front plow, the side plows, and the adjustable wings the roadway can be cut to the desired
10 width, the snow or other accumulations being rolled or pushed away from the track as the machine is propelled forward. By proper manipulation of the side moldboards carrying the plows or scrapers the irregularities
15 and knolls in the road are leveled and the holes and cavities filled up, so as to present a smooth and perfectly-level road. By attaching any of the well-known forms of rut-cutters to the moldboards the desired depth and width of
20 ruts can be made, and the snow and ice taken therefrom is carried by the moldboards to the side of the track.

All the various parts of my improved machine are formed of suitable hard wood, thus
25 dispensing with the employment of expensive castings and metallic parts which are not readily obtainable in the lumber regions, the only metal employed in my improved construction being the screw-rods, the metallic strips for
30 the runners, and the sheet-metal or boiler-plate strips to form the plows or scrapers at the lower ends of the moldboards.

Having thus described the essential features of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A snow-plow or road-making machine,

the main frame or body whereof is formed by the two central runners extending the entire length of the machine, the two side runners, and the connecting-platform; said main frame
40 or body being provided with the front plow arranged between the two central runners, the diagonally-located moldboards, carrying the plows or scrapers, arranged between the two central runners and the side runners at the
45 front of the platform, and the laterally-adjustable side wings, all arranged substantially as and for the purpose specified.

2. In a snow-plow or road-making machine, the combination of the central runners, the
50 side runners, and the platform, all forming the main frame of the machine and provided with the front plow, the vertically-adjustable moldboards, carrying plows or scrapers, one on each side of the central runners, and the
55 laterally-adjustable side wings, substantially as specified.

3. In a snow-plow or road-making machine, the vertically-adjustable moldboard provided with the wedge-shaped inner end, f, and vertical strip, f³, in combination with the wedge-shaped groove or mortise, f', on the side of the central runner, A, and the forward vertical wall of the side runner, B, substantially
65 as specified.

In testimony whereof I have hereunto attached my signature in presence of two subscribing witnesses.

FRANK KING.

Witnesses:

E. A. WILSON,
ISAAC KENWELL.