

No. 734,431.

PATENTED JULY 21, 1903.

B. F. RIX.
KNOCKDOWN SLED.
APPLICATION FILED FEB. 24, 1903.

NO MODEL.

Fig. 1.

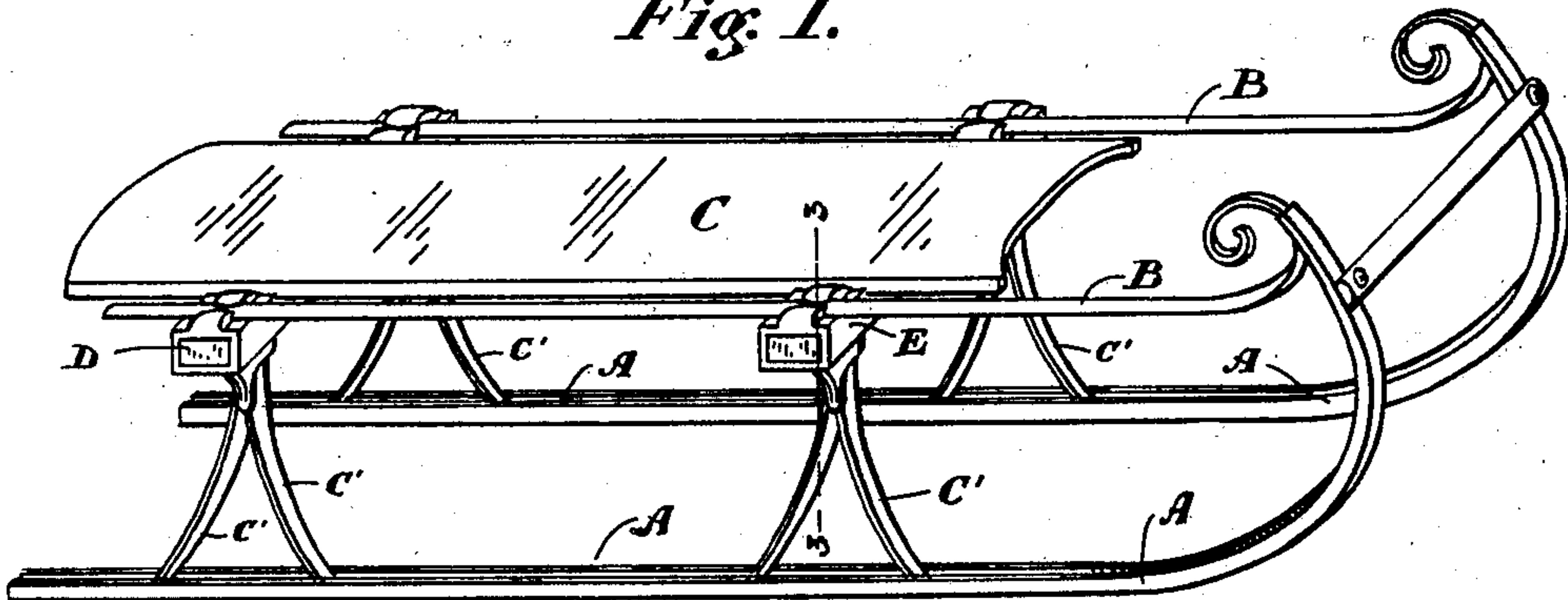


Fig. 2.

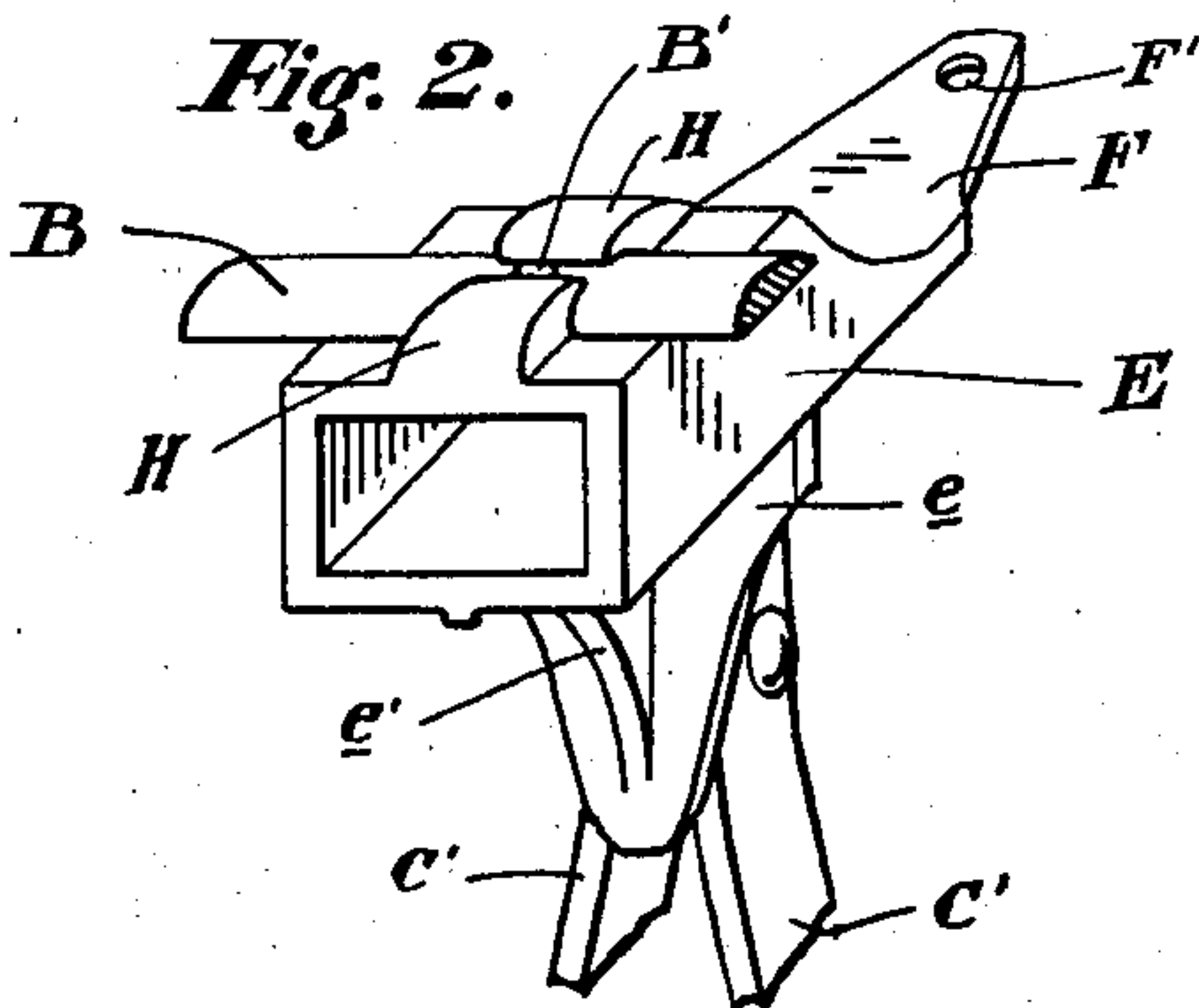
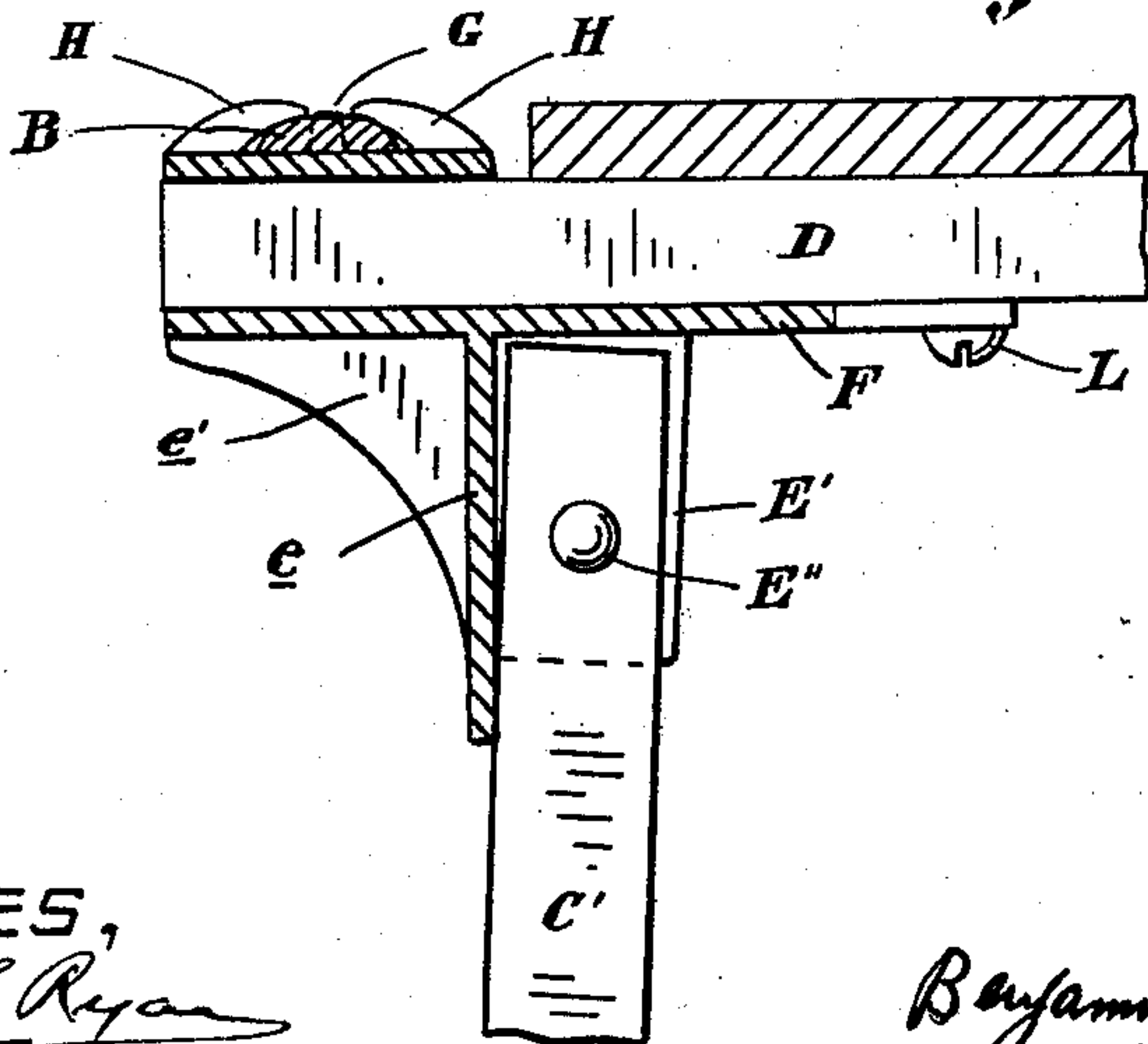


Fig. 3.



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KNOCKDOWN SLED.

SPECIFICATION forming part of Letters Patent No. 734,431, dated July 21, 1903.

Application filed February 24, 1903. Serial No. 144,569. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN FRANKLIN RIX, a citizen of the United States of America, and a resident of Kalamazoo, county of Kalamazoo, State of Michigan, have invented certain new and useful Improvements in Knockdown Sleds, of which the following is a specification.

This invention relates to a new and useful knockdown sled, the object of the invention being to manufacture a knockdown sled which can be easily taken apart and assembled.

A further object is to provide improved means for securing the rave to the bench of the sled without the aid of screws, bolts, or rivets.

These and other objects not hereinbefore mentioned are accomplished by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate corresponding parts in the several views, and in which—

Figure 1 is a perspective view of my improved sled. Fig. 2 is a perspective view of the upper portion of the knees, socket, and a portion of the rave. Fig. 3 is a section on the line 3 3, Fig. 1, parts being in section and showing the boss in dotted lines.

In the drawings, A designates the runners, and B the raves.

C designates the seat-board, and D the cross-piece. The cross-pieces extend out beyond the sides of the seat-board.

C' designates the knees.

The parts just described are of the usual and ordinary construction.

E designates a socket. Depending from this socket is a lip E'. This lip is positioned between the upper ends of the knees and is secured to the knees by means of a rivet E''. The bottom portion of the socket is provided with an inwardly-extending portion F, which is provided with an aperture F'. On top of the socket is a boss G and the tongues H. The raves are provided with apertures B'.

In assembling the parts the sockets are secured to the upper ends of the knees, as before described, the raves are placed on top of the sockets, so that the boss on each socket will fit into the aperture in the raves, and the tongues are then clamped down over the raves. By this construction the raves are secured to the sockets and knees without the aid of screws, bolts, or rivets and at the same time are held firmly in position and are prevented from slipping longitudinally by means of the boss fitting into the aperture in the rave. The sockets are made of malleable iron, so that the tongues can be cold clamped down over the raves. This feature of the invention I regard as very important, for the reason that there are no screws, bolts, or rivets to work out of place, the appearance of the coupling is enhanced, and the cost of manufacture is greatly reduced. The sockets are made of a single casting and being made of malleable iron are of sufficient strength to withstand all strain imposed upon them. The seat-board is detachably secured to the inwardly-extending portion F of the socket by means of screws L passing through the aperture into the bottom of the cross-pieces after the protruding ends of the same have been inserted into the sockets.

To knock down the sled, it is only necessary to remove the screws L from the seat-board, leaving the rave and its corresponding runner secured together by means of the knees and sockets.

The lip E is provided with the rib e to prevent the socket from turning between the upper ends of the knees, and the rib is provided with the strengthening-web e'.

I am aware that many minor changes can be made in the construction and arrangement of parts without in the least departing from the nature and principles of my invention.

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

In a knockdown sled, the combination with the runners and knees, of a socket secured to the upper end of each knee, provided with a boss and a pair of tongues, a rave provided
5 with an aperture adapted to rest on the socket so that the boss on the socket fits within the aperture, the tongues on the socket being adapted to clamp over the rave, a seat-

board, and means for detachably securing the seat-board to the sockets. 10

Signed at Wabash, Indiana, this 12th day of February, 1903.

BENJAMIN FRANKLIN RIX.

Witnesses:

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