

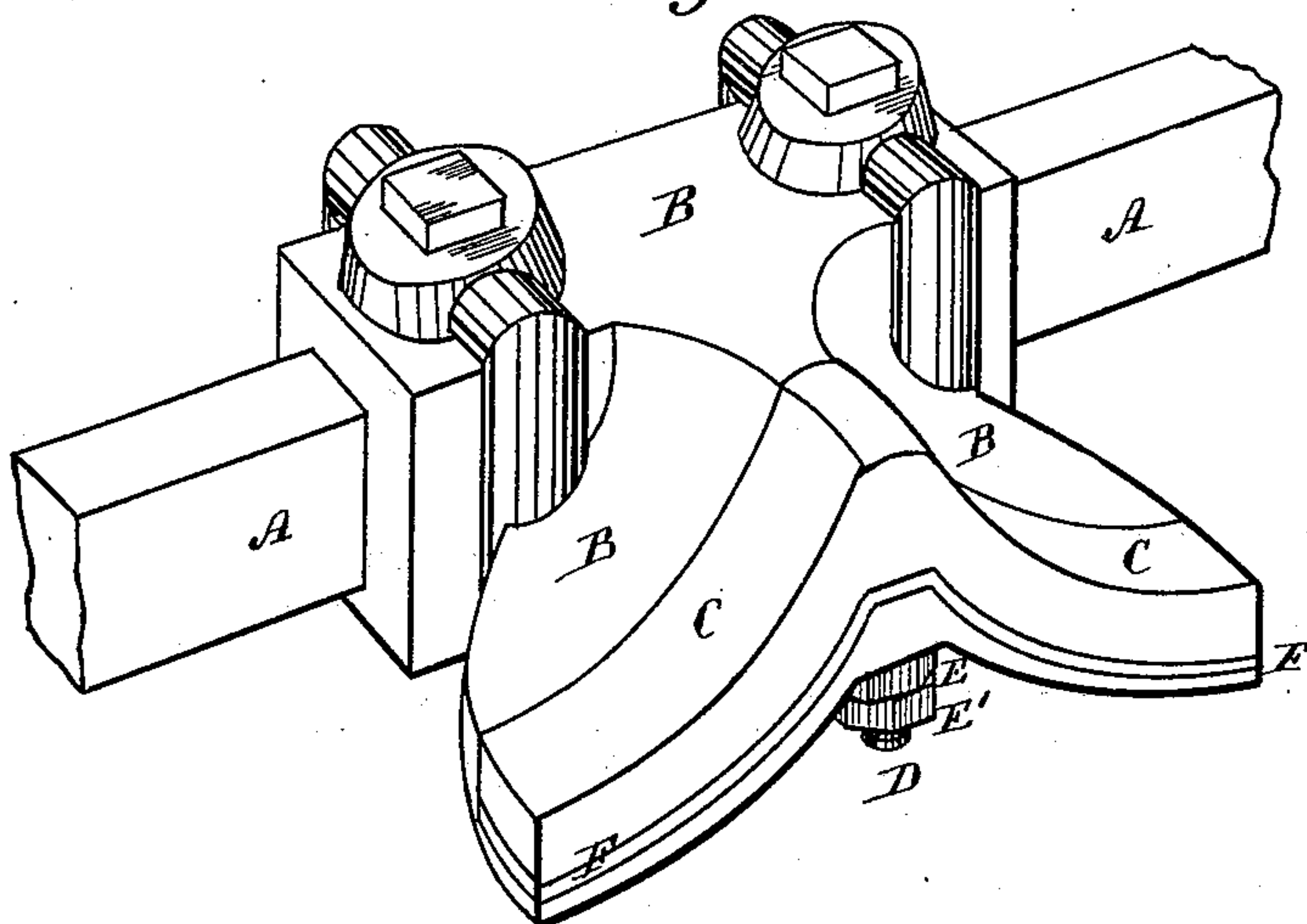
(No Model.)

H. B. MURLLESS.  
PICKING SHOE FOR LOOMS.

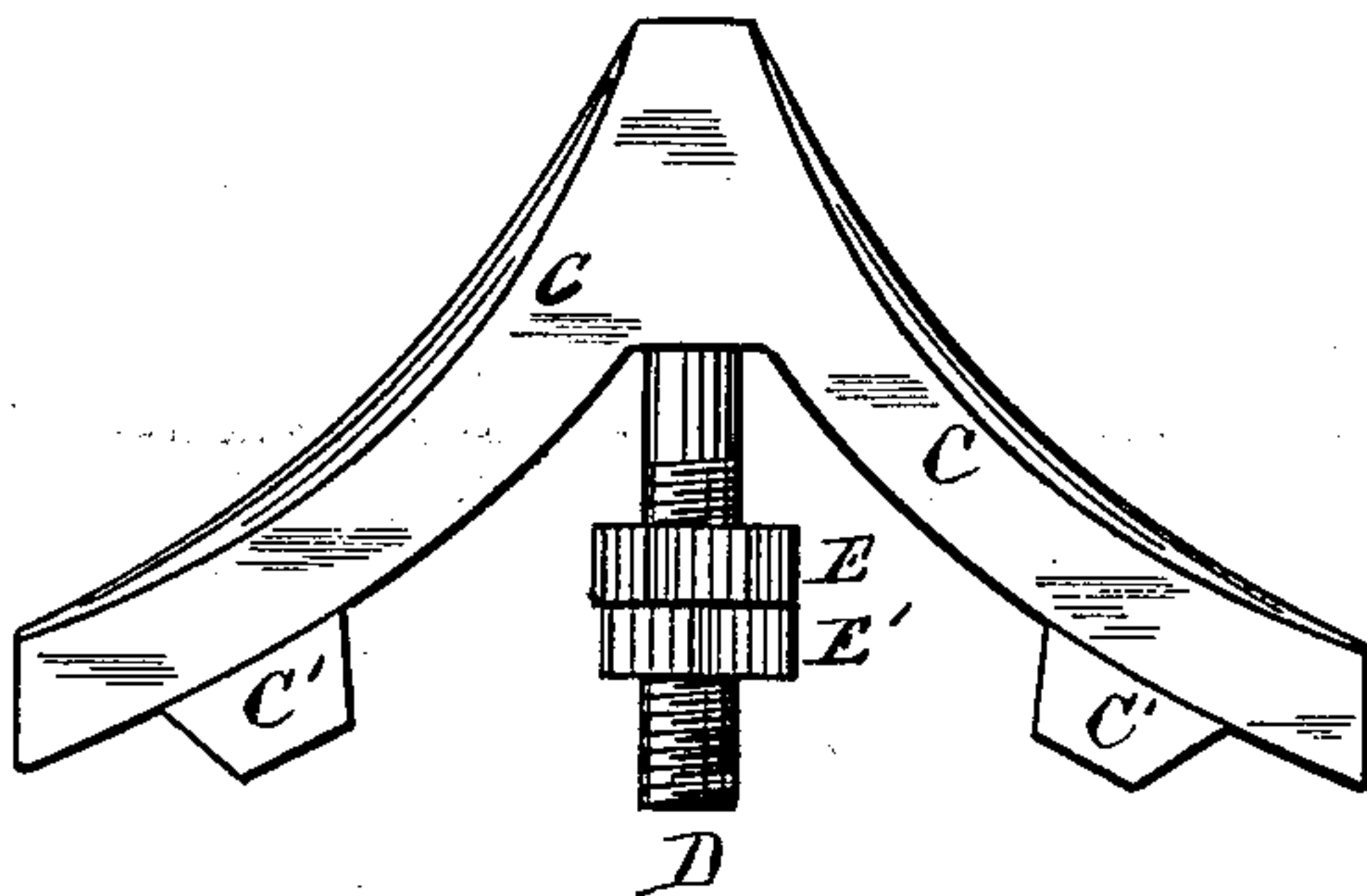
No. 253,619.

Patented Feb. 14, 1882.

*Fig. 1.*



*Fig. 2.*



Witnesses.

Chas. L. Burdett  
Edwin F. Nimock.

Inventor.

Herbert B. Murlless  
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# UNITED STATES PATENT OFFICE.

HERBERT B. MURLLESS, OF ROCKVILLE, CONNECTICUT.

## PICKING-SHOE FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 253,619, dated February 14, 1882.

Application filed June 8, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT B. MURLLESS, of Rockville, in the county of Tolland and State of Connecticut, have invented certain new and useful Improvements in Picking-Shoes for Looms; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvement relates to what are known as "picking-shoes for looms." The picking-shoe is a casting which is attached to the square shaft which passes across the frame of the loom, and from which projects upward the arm or lever which throws the shuttle. The shoe is a cam for rocking this shaft and receives its impulse generally from a revolving arm just above it, which carries a roller which strikes the shoe at each revolution and pushes it downward. This rocks the shaft and gives the throw to the shuttle. These shoes have heretofore been made of cast-iron, and are rapidly worn out from the repeated blows of the roller which operates them. These shoes are generally made reversible on this account, so that they can be changed from end to end of the loom and be worn upon both sides or cam-surfaces. One is required at each end of the loom, and their positions are reversed. The iron of which the shoe is made has to be soft and tough in order to withstand the shock to which it is subjected, and it consequently wears much more than a harder metal and has to be more frequently replaced.

The object of my invention is to provide a shoe which will be better adapted to withstand the shock, which will wear longer than the shoe of ordinary construction, and which can be more readily replaced when worn out.

In the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of my improved shoe. Fig. 2 is a front view

of the detachable protecting plate or point which receives the wear in my improved shoe.

A is the rectangular bar, to which the shoe is attached in the customary manner.

B is the body of the shoe. This is commonly made of cast-iron and is made in the ordinary form, except that the forward edge, which commonly receives the impulse from the roller, is cut away or formed with a recess for attaching the plate C.

C is a plate or cam which forms what is commonly called the "point" of the shoe. Its top surface for receiving the blow of the roller is of the usual form. This plate is intended to be of steel or other hard metal for receiving the wear, and can be cast or cut to its true shape by any of the customary means. It is provided with a screw-bolt, D, which passes through the body of the shoe, and is secured below by the set-nuts E and E'.

C' C' are studs or projections which form part of the plate C and fit into sockets in the body of the shoe to prevent it from moving laterally out of position.

F is an elastic packing, intended to be of rubber or other similar material, interposed between the plate C and the body of the shoe B. The screw D and nut E draw the plate C down firmly upon this packing, so that while the shoe and plate are held firmly together there is still a certain amount of elasticity between the parts to modify the shock of the impact of the roller which operates the shoe and give an easier movement to the parts, as well as to prevent breakage and wear.

By means of my improvement the wearing part of the shoe can be made of a harder and better material than the body of the shoe, and thus wear a longer time. It also permits of the worn part being more readily replaced, as the whole shoe does not have to be taken off, but only the plate C, upon which the wear wholly comes. The elastic packing also adapts the shoe to better withstand the shock of the blow received from the roller.

In the drawings the shoe shown is made

with two inclined surfaces, each being of the same form. This is so as to make the shoe and plate C reversible or adapted for either end of the loom. They can, however, be made  
5 with only one cam-face, if desired.

What I claim as my invention is—

1. The combination of the separate plate C, having a screw-bolt, D, and studs C', with the  
10 body of a picking-shoe for a loom, substantially as described.

2. The combination of the separate cam-plate C with its screw-bolt D and studs C', the elastic packing F, and the body of the shoe B, substantially as described.

H. B. MURLLESS.

Witnesses:

EDWIN F. DIMOCK,  
THEO. G. ELLIS.