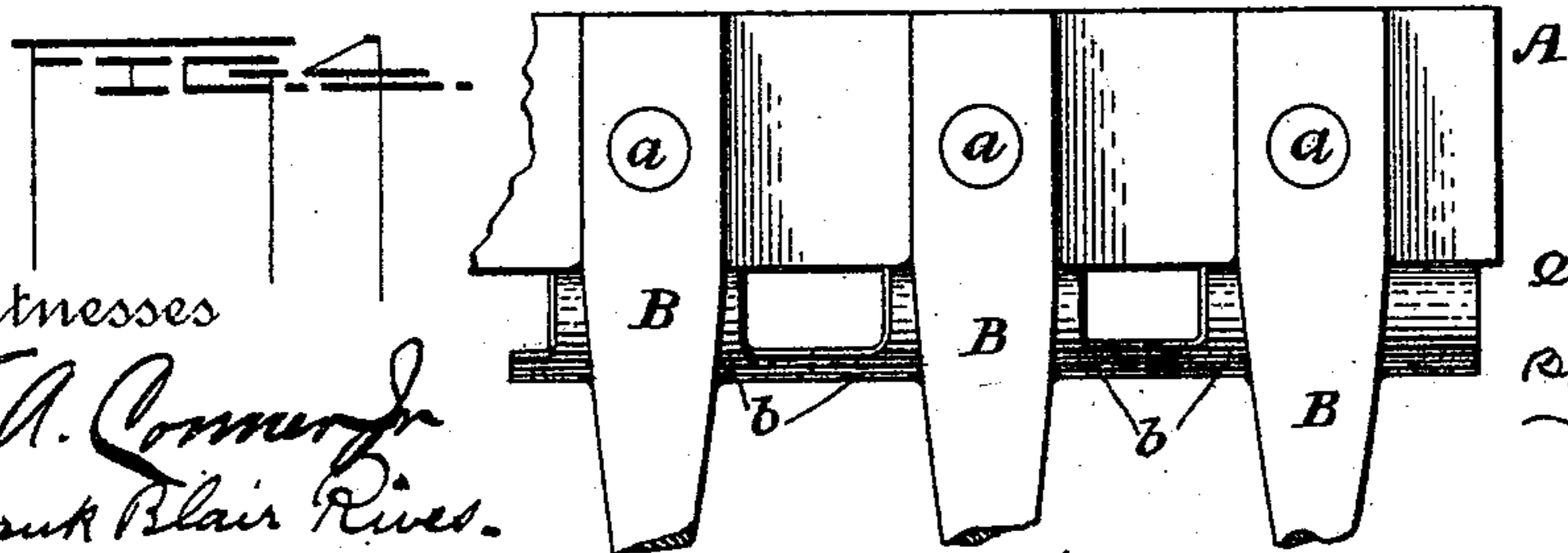
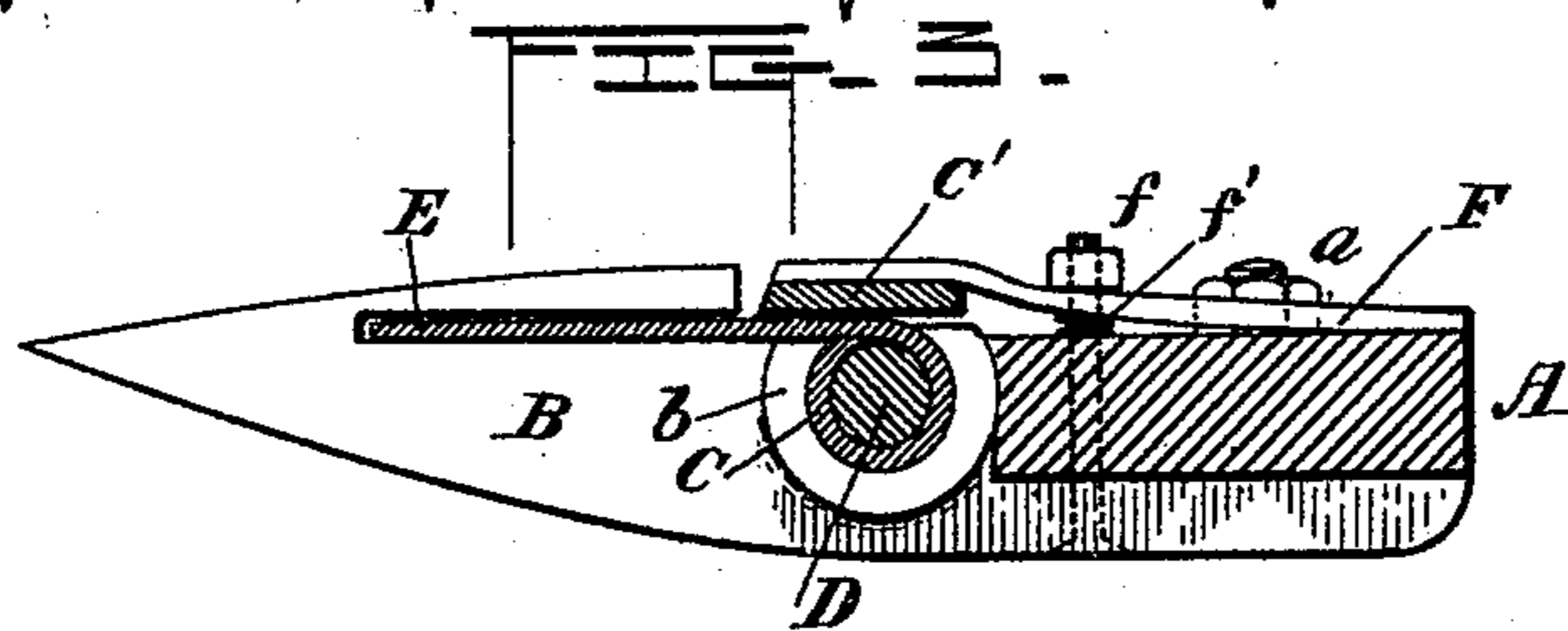
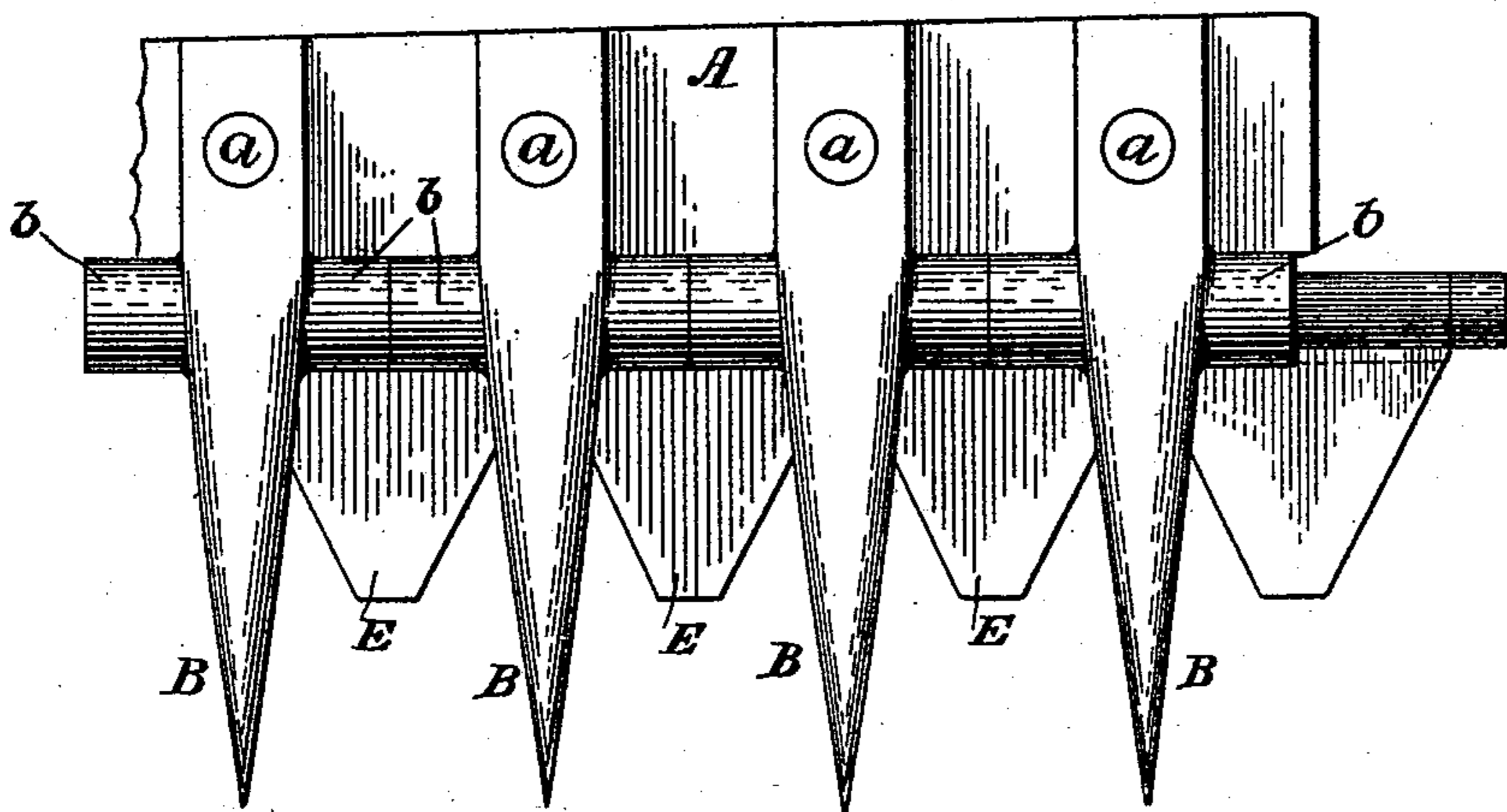
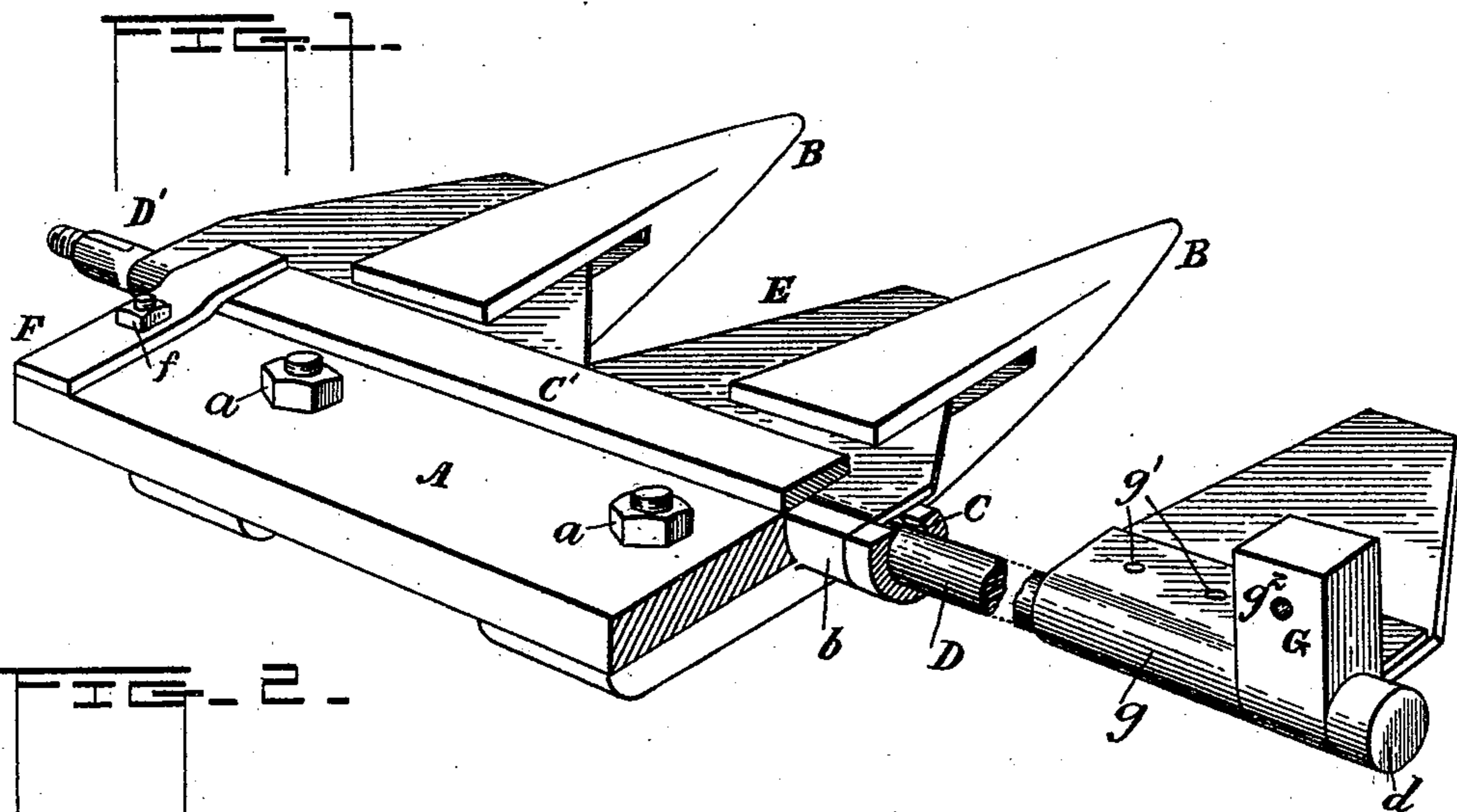


No Model.)

C. D. HILLABOLD.  
CUTTER BAR FOR HARVESTERS.

No. 497,320.

Patented May 16, 1893.



Witnesses  
*L. A. Conner*  
*Frank Blair Rives*

Inventor  
*Chas. D. Hillabold*  
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# UNITED STATES PATENT OFFICE.

CHARLES D. HILLABOLD, OF CANTON, KANSAS, ASSIGNOR OF ONE-HALF TO  
M. S. BENTZ, OF SAME PLACE.

## CUTTER-BAR FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 497,320, dated May 16, 1893.

Application filed March 11, 1892. Serial No. 424,493. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES D. HILLABOLD, a citizen of the United States, residing at Canton, in the county of McPherson and State of Kansas, have invented certain new and useful Improvements in Cutter-Bar for Harvesters; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to harvesters, and it consists in certain improvements on the cutting apparatus for which a patent was granted to me August 25, 1891, No. 458,231.

My present invention aims to simplify and cheapen the construction, and render it more durable, and easier to repair.

Figure 1 in the drawings is a perspective sectional view of a cutting apparatus embodying my improvements. Fig. 2 is a bottom plan view of the same. Fig. 3 is a sectional end elevation, and Fig. 4 is a bottom plan view of a modification.

To the finger bar A are secured the fingers B, by bolts *a*. Cast integral with each finger is one or more laterally projecting lugs *b* which fit against the front edge of the finger bar. A groove is formed through these lugs, and across the finger parallel with the finger bar, and when all the fingers are in place, these grooves all lie in the same straight line, and form a trough or guide C for the cutter bar D. The knife sections E are made as described in my former patent, by bending the base portion of a triangular piece of metal to fit snugly around a cylindrical or polygonal bar, the outer surfaces of these base portions being of a suitable size to slide smoothly in the trough C, over the front edge of which the knife sections project. A lock nut D' screwed upon the threaded end of the cutter bar, clamps all the knife sections firmly in place. Above the knife sections is placed a guide bar C' carried on the ends of the arms F, which are fastened upon the top of the finger bar by means of screw

bolts *f*. A spring washer *f'* is inserted between the finger bar and the arm F, so that the wear and tear of the guide bar can be taken up. The lugs *b* on the fingers may abut as shown in Figs. 1, 2 and 3. But inasmuch as they are liable to be worn out by grit working into them, they are preferably cut away at one or more places as shown in Fig. 4, to allow the dirt to drop out as it is moved along by the knives. I attach the head block G to the cutter bar without weakening the latter by putting bolts or rivets through it. This is accomplished by forming a head *d* on the bar D and providing the head block G with a sleeve *g* fitting the bar. The sleeve may also have a longitudinal flange *g'* to which a knife section E can be riveted. The head block has a hole *g*<sup>2</sup> or other suitable means for the connection of the pitman therewith.

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

1. The combination with a finger bar, of the fingers each having a laterally projecting lug containing a cylindrical groove forming a trough shaped guide open at the top, a cutter bar provided with separate knife sections, each having a cylindrical base to receive the bar and fit the groove, said sections resting upon one edge of the guide, a guide bar resting upon the top of the sections, and arms carrying said guide bar, and attached to the finger bar, substantially as described.

2. The combination with a finger bar of fingers having lugs containing a cylindrical trough shaped guide, open at the top, a cutter bar, separate knife sections having cylindrical bars to receive the bar, and fit the guide, upon and by one edge of which said sections are supported, a guide bar resting upon the top of the sections, arms carrying said guide bar, and springs between said arms and the finger bar, substantially as described.

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

CHARLES D. HILLABOLD.

Witnesses:

A. FILKINS,

L. H. MERRILL.