

J. W. BROKAW.  
Fingers for Harvesters.

No. 21,533.

Patented Sept. 14, 1858.

Fig. 2.

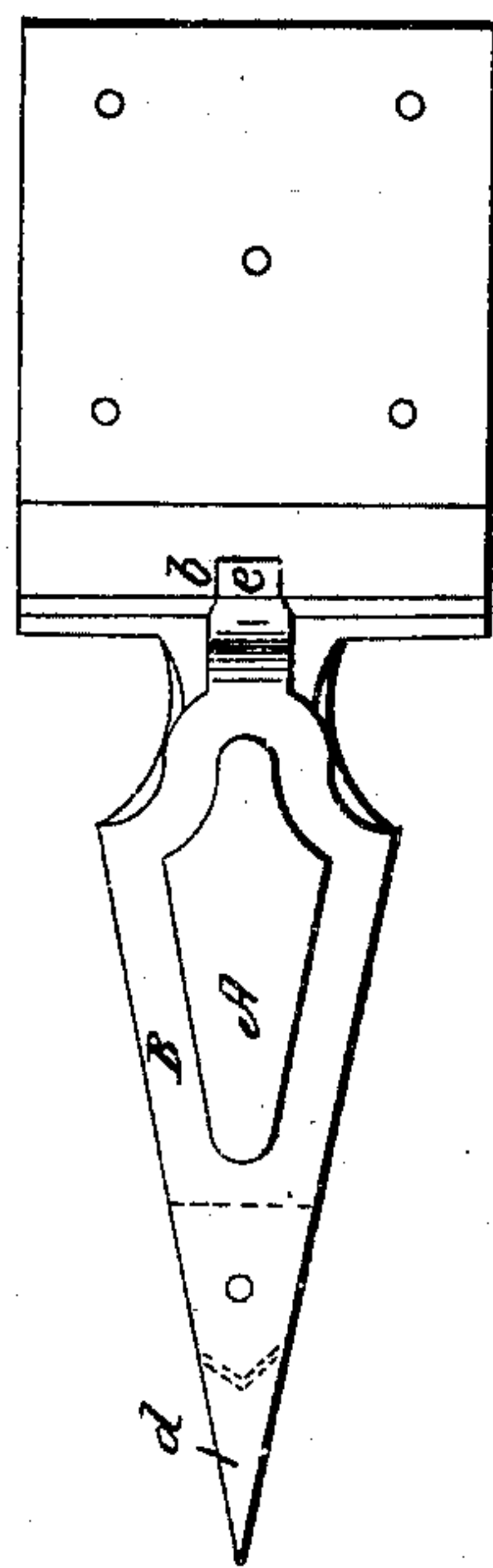


Fig. 3.

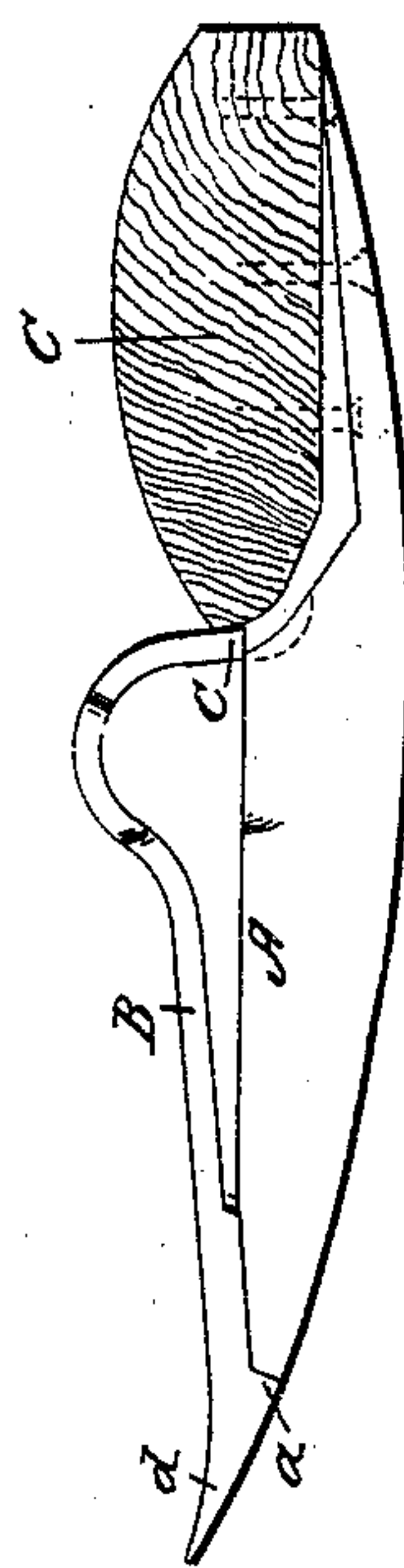


Fig. 4.

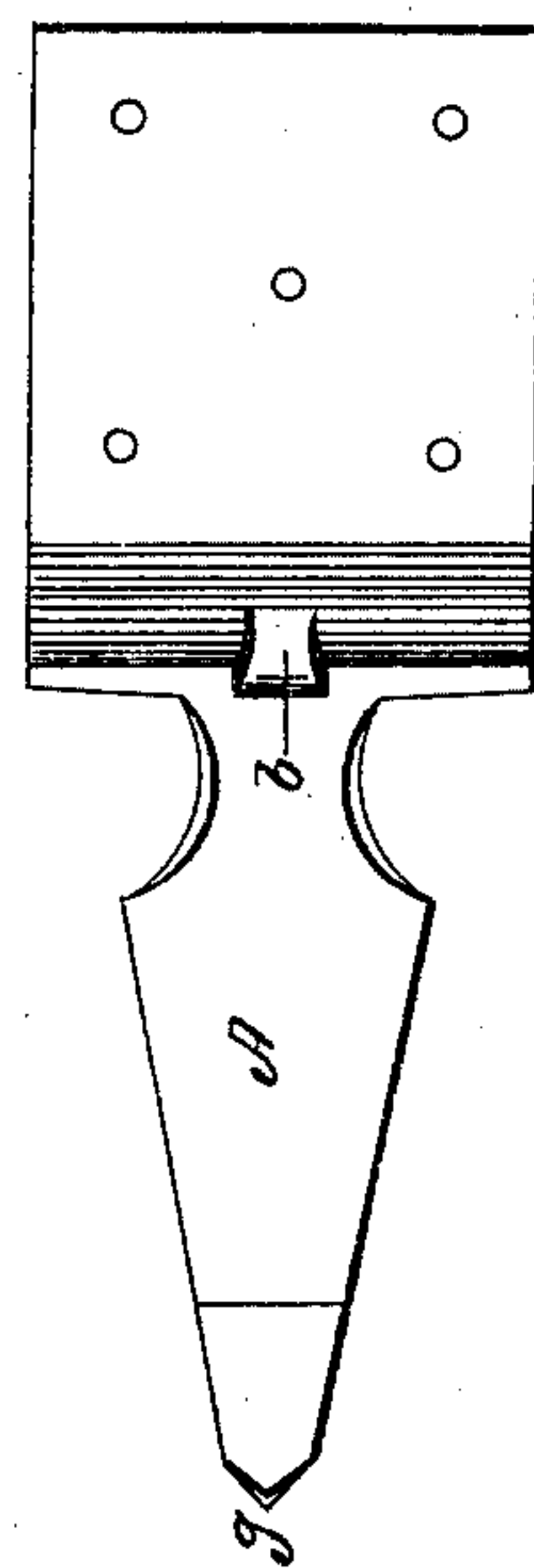
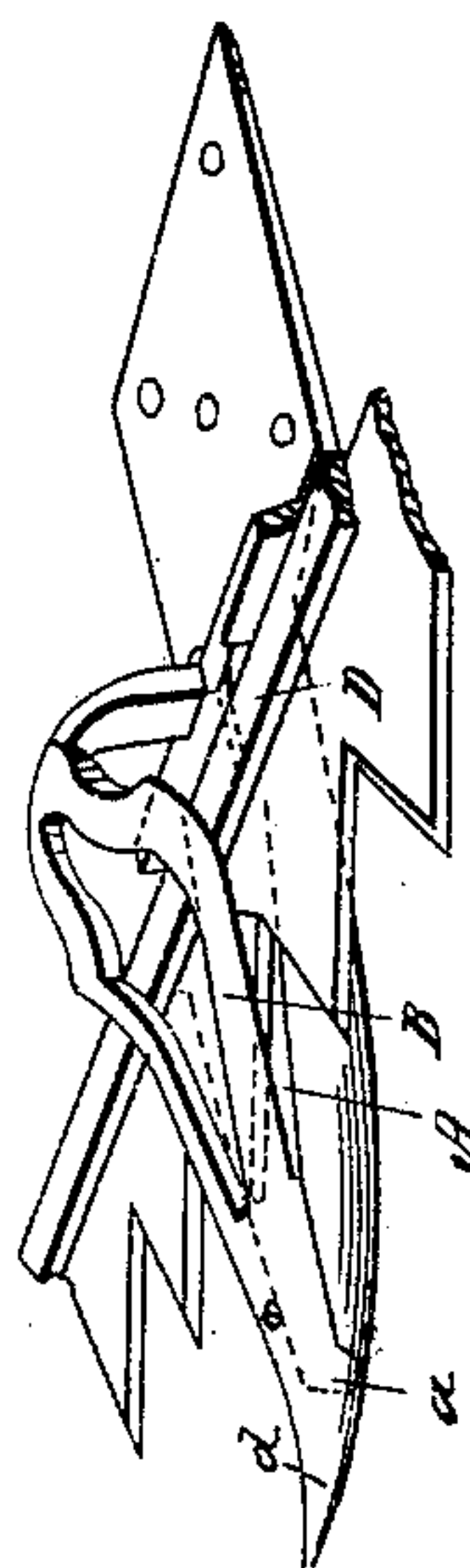


Fig. 1.



# UNITED STATES PATENT OFFICE.

JOHN W. BROKAW, OF SPRINGFIELD, OHIO, ASSIGNOR TO WARDER, BROKAW  
& CHILD, OF SAME PLACE.

## IMPROVEMENT IN GUARD-FINGERS FOR HARVESTERS.

Specification forming part of Letters Patent No. **21,533**, dated September 14, 1858.

*To all whom it may concern:*

Be it known that I, JOHN W. BROKAW, of Springfield, in the county of Clarke and State of Ohio, have invented a certain new and useful Improvement in Fingers for Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings of the same, in which—

Figure 1 represents a view in perspective of a finger with a portion of the sickle broken off, having my improvements applied thereto; Figs. 2 and 3, a plan and side elevation, respectively, of the same, and Fig. 4 a plan of the finger with the cap removed.

The object of my improvement is to provide a guard-finger at a cheap rate that will possess all the requisite qualities for resisting the various forces brought to bear upon it, and that will not be subject to be choked or clogged up; and its nature consists in forming the finger in two parts of different kinds of the same metal, (wrought and cast iron,) in a manner to be hereinafter described, so that the strength of the different metals will be brought to bear in the direction that each, from its peculiar nature, will be best adapted to resist, and so that the cheapest metal will form the larger and heavier portion of the finger, by means of which the cost of the finger is materially reduced, as well because of the difference in cost of materials as in the cost of the manufacture of that part of the finger.

To enable others skilled in the art to make, construct, and use my invention, I will now proceed to describe it in detail.

The finger, as delineated in the drawings, consists of two principal parts, the base A and cap-piece B, the front end of the former of which is beveled off at the sides, and a counter-notch, *a*, as it were, formed on the under side of the point *d* of the cap, into which the point *g* of the base fits.

At the rear end of the finger, in that portion of it which secures it to the finger-bar by being bolted to it on its under side, is a notch, *b*, of such size and shape as to receive the rear end of the cap-piece A. This end is somewhat elongated in a horizontal direction, so that

when fitted in the notch *b* and the finger secured to its bar it shall be confined in that position by being compressed between the two. The rear part of the cap B, immediately over the sickle-bar D, is raised or curved over the latter to a height sufficient to prevent the possibility of its being choked up by grass or other such substances working between it and the finger-bar. The middle portion of it is also left open for a similar purpose. Thus formed, the two parts (the cap and base) are fitted and secured together, either by uniting them at or near the point, or in any other suitable manner. The base A, which is much the larger and heavier portion of the finger, is formed of cast-iron, and the cap and point B, which form the point of the finger, of wrought or malleable iron.

By making the base of cast-iron and forming the point *b* and the cap of wrought-iron the upper side of the base, and which in fingers forms the stationary knife, can be ground off the smooth, and with sharp cutting-edges with gear ease and expedition. At the same time point is made of a stronger and tougher metal, better calculated to resist sudden concussions and strains than if made of cast-iron. Then by curving the cap of the finger back over the sickle-bar, and so as to prevent choking, all the advantages of the open guard or finger are obtained. At the same time greater strength and rigidity are given to the finger.

I do not claim broadly making the cap of harvester guard-fingers of wrought or malleable iron with a base of cast-iron; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The peculiar construction of the cap B, as described, when made of wrought or malleable iron, and connected to the cast-iron base A and to the finger-bar, in the manner and for the purposes set forth.

In testimony whereof I hereunto set my hand to this specification.

J. W. BROKAW. [L. S.]

Witnesses:

J. R. DODGE,

J. S. CHRISTIE.