

(No Model.)

T. S. BROWN.

FINGER AND FINGER BAR FOR HARVESTERS.

No. 353,534.

Patented Nov. 30, 1886.

Fig. 2.

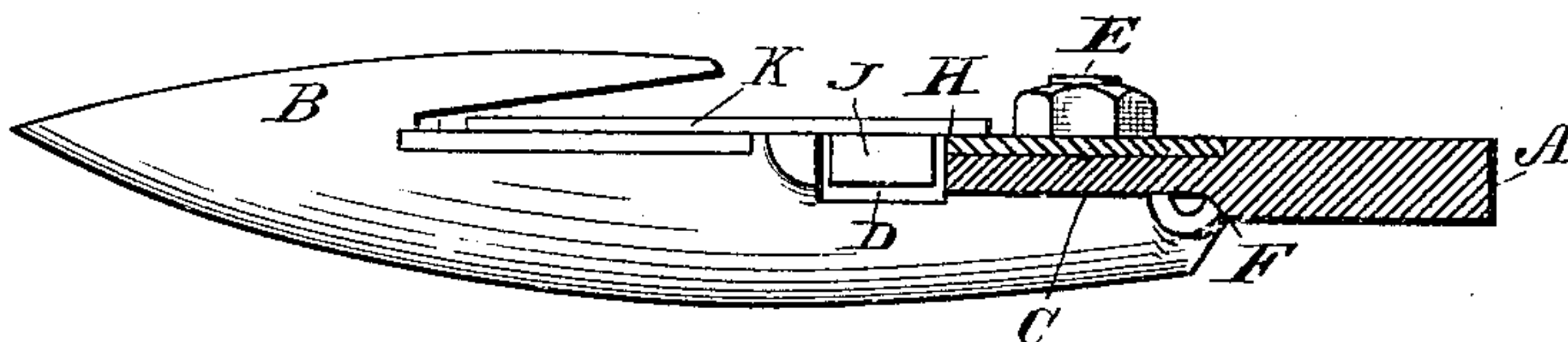


Fig. 1.

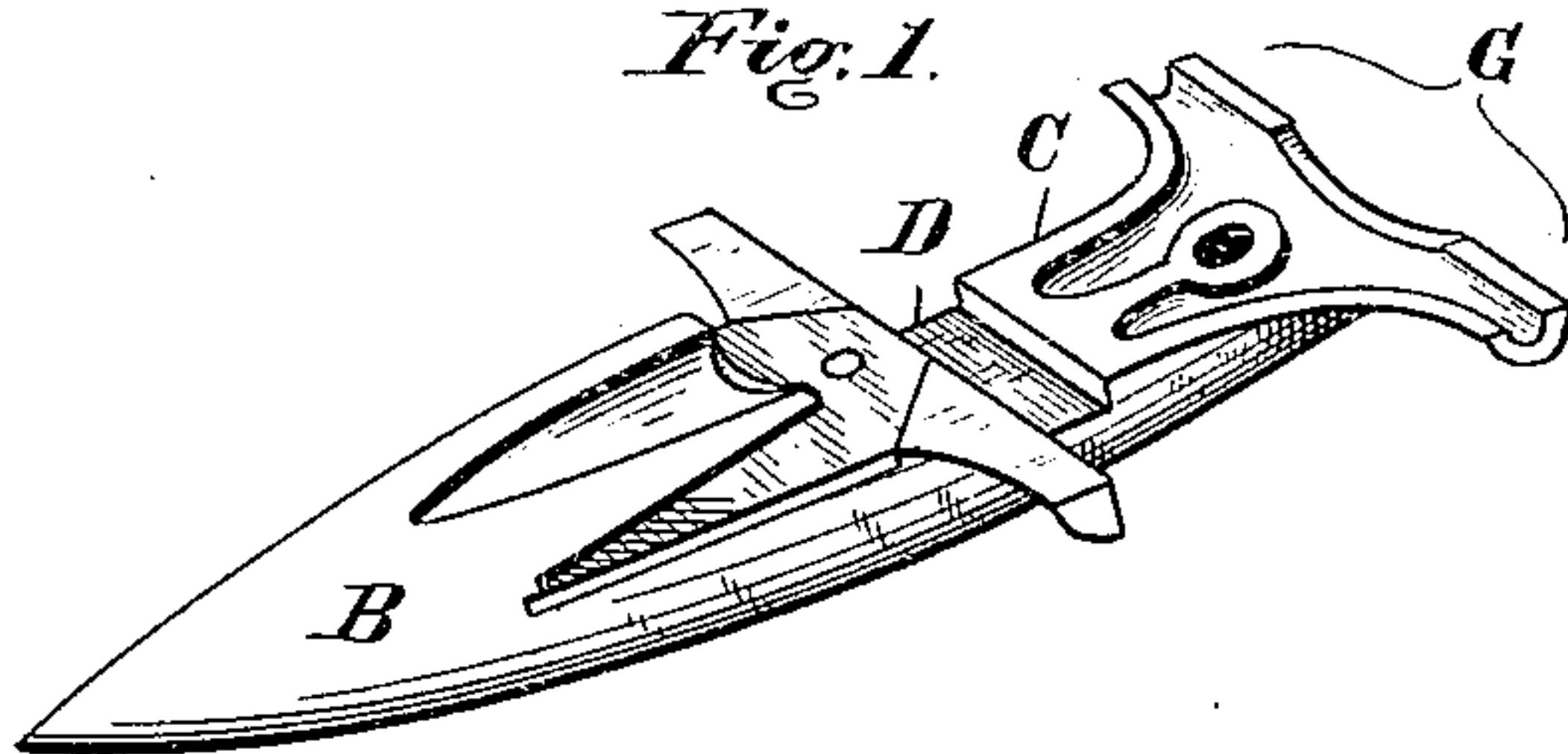
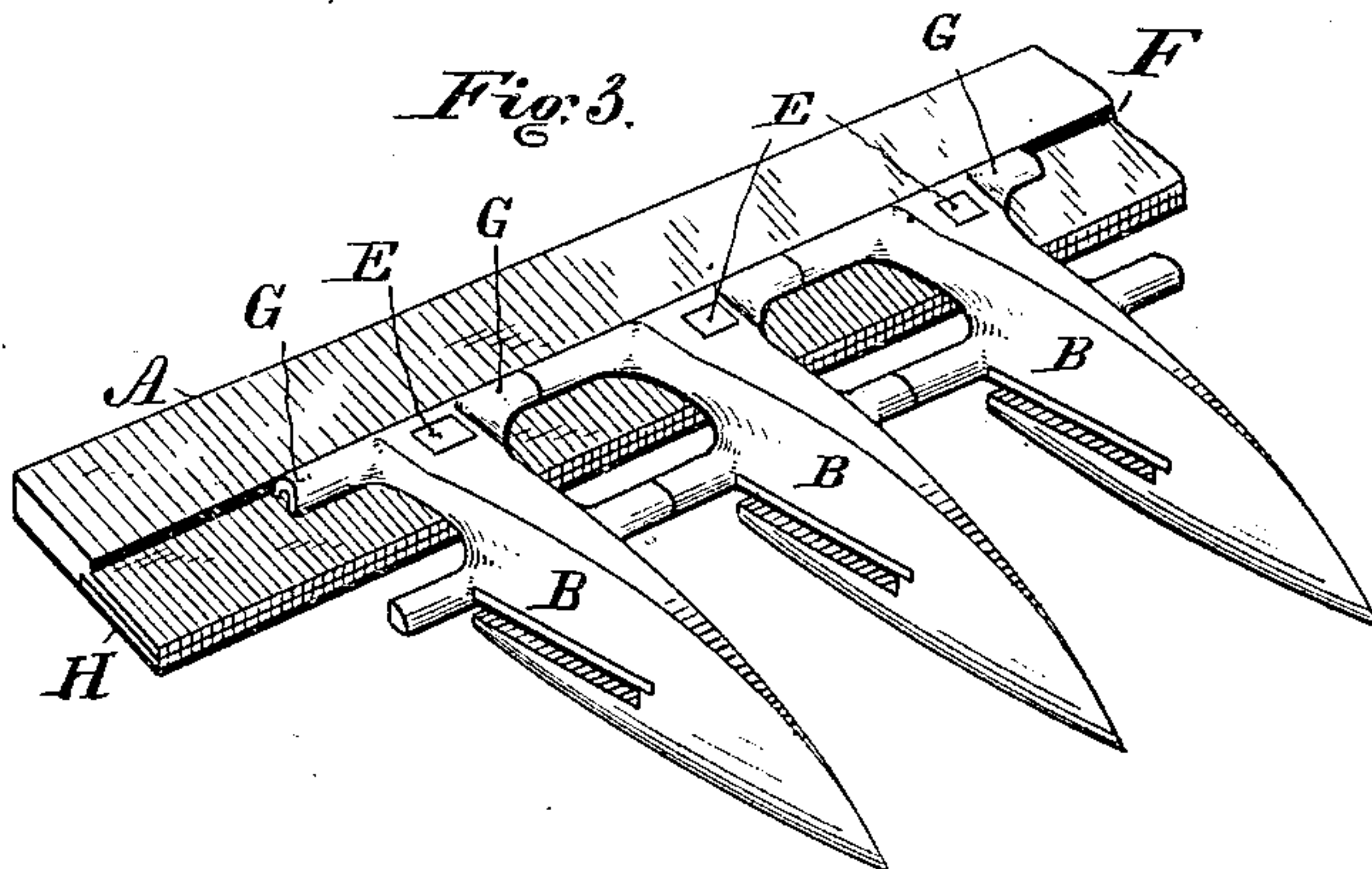


Fig. 3.



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THOMAS S. BROWN, OF POUGHKEEPSIE, NEW YORK.

FINGER AND FINGER-BAR FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 353,534, dated November 30, 1886.

Application filed July 2, 1885. Serial No. 170,453. (No model.)

To all whom it may concern:

Be it known that I, THOMAS S. BROWN, of the city of Poughkeepsie, in the State of New York, have invented a new and useful Improvement in Fingers and Finger-Bars for Harvesters, of which the following is a specification.

The object of my invention is to provide a guard-finger for finger-bars of such form that it may be easily and firmly secured to the bar so as to resist displacement, and of such construction as to more readily permit of the surface of the finger which comes into contact with the bar being ground or dressed without destroying the emery-wheel or tool used for the purpose; and its further object is to provide a finger-bar the upper front surface of which is of steel, whereby the wear of said surface is prevented, and the consequent dropping down of the rear of the scythe-sections and the lifting or tilting up of the points thereof, and the consequent clogging of the knives obviated.

In the drawings, Figure 1 is a view in perspective of my improved finger, and Fig. 2 a side elevation thereof and a transverse sectional view of the finger-bar to which it is attached. Fig. 3 is a perspective view of the finger-bar with fingers attached thereto, the parts named being turned upside down.

B is the finger, the upper rear face, C, of which is ground or dressed off and lies in contact with the under front surface of the finger-bar A when the fingers are in place upon the same. The heel or rear extremity of the finger B is enlarged or expanded transversely, so that the rear edge thereof is made to come into close contact with and abut against the longitudinal shoulder or abutment F upon the lower surface of the finger-bar, and the sides of the enlarged or expanded heel of the finger are caused to abut against the adjacent sides of the adjacent fingers when the same are in place upon the bar. The fingers are secured to the bar by bolts E.

In order that the upper rear face or surface of the tooth B may be accurately ground and dressed, so as to fit closely to the under surface of the finger-bar without destruction or injury to the emery-wheel or other tool by which the grinding or dressing is effectuated, I provide the guard-finger B in its upper sur-

face with a transverse channel or slot, D, forward of and adjacent to the upper surface, C, which is to be ground or dressed, said slot being so located as that its rear wall shall be flush or in a vertical plane with the front edge of the finger-bar when the fingers are in place upon said bar.

The cutter bar or stock J is contained and adapted to be reciprocated in the slots D of the fingers, and the knives or sections K forward of the stock J rest upon the upper surface of the fingers in front of the slot D and rearward of the stock J upon the upper surface of the finger-bar. The back edge of the stock J rests and works against the front edge of the finger-bar and the back wall of the slot d.

In grinding the surfaces of harvester-fingers it is usual to employ a grinding-wheel which consists, essentially, of a circular plate or disk mounted upon and adapted to be revolved by a horizontal shaft, said circular disk being provided upon its outer surface with an annular grinding-rim. The outer or exposed flat surface of said annular rim, or the surface thereof which is parallel to the face of the circular plate upon which it is mounted, is employed as the grinding-face. This grinding-face is caused to operate upon the surface of the finger to be ground by mounting and holding the finger in a chuck which is so located in respect to the grinding-wheel as to permit of the surface to be ground being brought into contact with said grinding surface. It is obvious that if but part of a continuous surface should be ground by the grinding-wheel described the edges of the flat grinding-surface would, by contact with the unground part of such continuous surface be worn away and the flat grinding-surface of the wheel be destroyed.

It will be readily understood that the provision of the transverse channel or slot in the finger adjacent to that surface of the finger which is to be ground permits the grinding-surface of the grinding-wheel to pass entirely over the surface to be ground without coming into contact with other surfaces of the finger, with the result that the flat grinding-surface of the wheel is preserved and the wearing away of the edges of said grinding-surface prevented.

It is evident that the construction of the upper rear surface of the finger and the mode of attachment of the finger to the bar prevents the finger from being forced forward or side-
5 wise on or being otherwise displaced from the finger-bar.

In the drawings the finger-bar is provided with a recess in its upper front edge, into which a plate, H, of steel or other metal, fits
10 and is secured. It is obvious that this plate H may be applied to the upper surface of the bar without being recessed therein in any convenient manner. If the plate H be made
15 sufficiently wide to allow the bolts E E to pass through its longitudinal middle, it may be changed end for end or turned completely over, with the result that four different wearing-
20 surfaces may be presented at the upper front edge thereof on the line upon which the back part of the scythe-sections rest and work.

Such being the construction of my invention, I claim—

1. In a harvester, in combination, fingers, each provided in its upper surface with a trans-
25 verse cut or channel below and adjacent to the surface or part of the finger which rests against the finger-bar, and a finger-bar, the front edge of which constitutes the upper part of the rear wall of said cut or channel, as specified.

30 2. In a harvester, a finger-bar the upper surface of which is provided with a bar of steel or of other metal detachably secured thereto

and adapted to be reversed end for end or turned over, so as to successively present several wearing-surfaces, in combination with a
35 cutter-bar, the heels of the knife-sections of which rest and reciprocate upon the upper surface of said detachable bar, and the bar or stock of which rests and reciprocates against
40 the front edge of said finger-bar, as and for the purpose specified.

3. In a harvester, a finger-bar provided with a longitudinal shoulder or abutment, fingers, each provided with a broadened heel, and as
45 to its upper surface provided with a transverse cut, channel, or depression below and adjacent to the surface or part of the finger which rests against the finger-bar, and a vibrating knife-carrying bar or stock, said parts
50 being combined so that the rear edges of the heels of the fingers abut against said shoulder upon the finger-bar, and the side edges of said heels abut against the adjacent side edges of the heels of the adjacent fingers, and so that
55 the reciprocating cutter bar or stock is contained and adapted to be vibrated in said transverse cuts in the fingers, substantially as specified.

In testimony whereof I have hereunto signed my name this 8th day of June, A. D. 1885.

THOMAS S. BROWN.

In presence of—

R. F. WILKINSON,
LOUIS BEDELL.