

H. L. HOPKINS.
 FINGER-BARS FOR HARVESTERS.

No. 191,678.

Patented June 5, 1877.

Fig. 1.

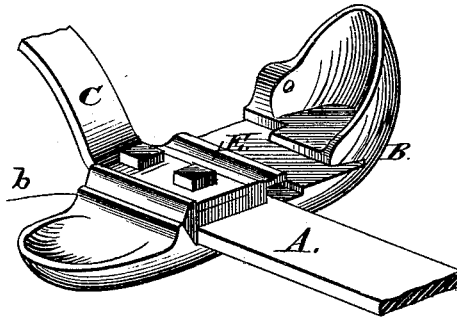


Fig. 2.

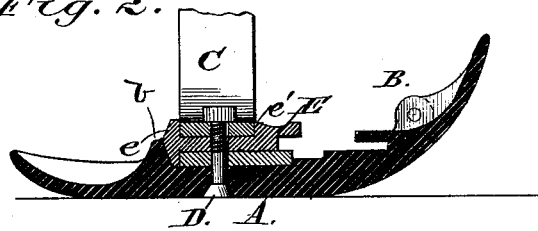
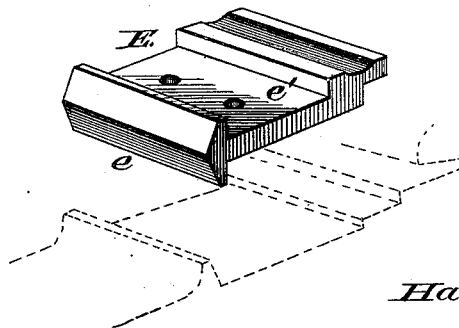


Fig. 3.



Attest:
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UNITED STATES PATENT OFFICE.

HARVEY L. HOPKINS, OF MANCHESTER, IOWA.

IMPROVEMENT IN FINGER-BARS FOR HARVESTERS.

Specification forming part of Letters Patent No. **191,678**, dated June 5, 1877; application filed April 24, 1877.

To all whom it may concern:

Be it known that I, HARVEY L. HOPKINS, of Manchester, in the county of Delaware and State of Iowa, have invented a new and useful Improvement in Harvesters, of which the following is a clear and exact description:

The object of this invention is to so combine the knife-heel plate, the shoe, and the finger-bar that said plate will wedge in behind the finger-bar, and thus not only prevent lateral motion of the finger-bar in its seat in the shoe, but become itself so firmly wedged in position that it will always form a true bearing for the knife-heel, even in case the rivets or bolts by which it is secured become loose.

To this end my invention consists in forming a downwardly-projecting wedge-shaped flange on the knife-heel plate, adapted to wedge in between the rear edge of the finger-bar and a shoulder on the shoe, the finger-bar being, as usual, seated in a recess across the shoe.

In the annexed drawing, Figure 1 illustrates my invention in perspective. Fig. 2 is a longitudinal section of the parts. Fig. 3 is a perspective view of the knife-heel plate detached, and on a larger scale.

The same letters of reference indicate like parts in all the figures.

The finger-bar A is seated in a recess across the shoe B. Ordinarily it fills this recess completely, and the knife-heel plate rests simply on top of it under the coupling-bar C, by which the cutting apparatus is connected to the frame of the harvester, so that said knife-heel plate depends solely on the bolts or rivets D for being held rigidly in position. The constant jar and joltings of a harvester are apt to loosen these bolts, when the knife-heel plate, becoming loosened in consequence, is liable to bend on the knife-heel and jam it. To overcome this difficulty, and at the same time to provide for an easy and tight fitting of the finger-bar in its seat, I form a downwardly-projecting wedge-shaped flange, *e*, on the

knife-heel plate E, which flange enters in between the rear edge of the finger-bar and the shoulder *b* on the shoe, the side of the shoulder facing the flange being made slanting in conformity with the slant of the flange. The knife-heel plate forms, together with the slot in the shoe, a guideway for the knife-heel, in the usual manner, and the coupling-bar may be seated in a recess in the plate, as shown, or connected to the cutting apparatus in any one of the usual ways.

The parts should be so made that in fitting them together the flange *e* of the knife-heel plate will exert a wedging action on the finger-bar before the flat surfaces of the plate and finger-bar come in contact. The knife-heel plate being thus wedged in position also provides for a most rigid and durable connection of the coupling-bar C, when the latter is rigidly secured by receiving said coupling-bar in a recess, *e'*, in its upper side, whereby lateral displacement is guarded against.

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

1. The knife-heel plate, having a downwardly-projecting wedge-shaped flange, *e*, substantially as and for the purpose specified.

2. The combination, substantially as specified, of the shoe, the finger-bar, and the knife-heel plate, having a wedge-shaped flange to wedge in behind the edge of the finger-bar.

3. The combination, substantially as specified, of the shoe, the finger-bar, the coupling-bar, and the knife-heel plate, having a wedge-shaped flange to wedge in behind the rear edge of the finger-bar, and a recess in its upper side for the reception of the coupling-bar.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

HARVEY L. HOPKINS.

Witnesses:

MARTIN CONNOLLY,
CHAS. A. NEALE.