

UNITED STATES PATENT OFFICE.

HARVEY R. FULLER, OF PRINCETON, MISSOURI.

IMPROVEMENT IN HARVESTER GUARD-FINGERS.

Specification forming part of Letters Patent No. 207,730, dated September 3, 1878; application filed August 22, 1878.

To all whom it may concern:

Be it known that I, HARVEY RUSSELL FULLER, of Princeton, in the county of Mercer and State of Missouri, have invented certain new and useful Improvements in Guard-Fingers for Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective of a guard-finger with my improvement attached. Fig. 2 is a longitudinal section of the same. Figs. 3, 4, and 5 are details to be referred to.

This invention relates to improvements in the class of guard-fingers for harvesters; and it consists in a novel construction of said guard-fingers, whereby I am enabled to replace any of the parts of the guard-fingers which are subjected to wear, and without removing the fingers from the cutter-bar.

It further consists in an adjustable instep for the guard-fingers, all as will be hereinafter fully described.

In the drawing, A represents the main portion of a guard-finger, which is provided, near the front end thereof, with a mortise, *a*, in which fits the tenon *b* of the movable and adjustable instep B of the guard-finger. The forward end of the tenon *b* is provided with a curved or hoop-shaped portion, *b'*, which fits in a corresponding slot or hole, *a'*, in the guard-finger, all as clearly shown in Fig. 2.

C represents a removable cross-plate to receive the friction from the sickle. This cross-plate is provided with a series of recesses, *c*, by which I am enabled to reduce the friction-surface of both the sickle-bar and sickle-knives. The cross-plate is also provided with a projection, *d*, on its under side, which fits into a mortise, *d'*, in the guard-finger.

E represents a removable ledger-plate, which is provided with a depressed center, *e*, and an extension, *e'*, which passes through a slot, *g*, in the guard-finger, into a slot, *g'*, in the cross-plate C, by means of which the cross-plate and said ledger-plate are secured to the guard-finger. The object of the depressed center of the ledger-plate is also to reduce the friction of the sickle-knives playing over the same.

F represents a reversible spacing-block, lo-

cated between the forward end of the ledger-plate and the adjustable instep. Said spacing-block is provided with projections *ff*, which fit in mortises *f' f'* on the under side of the instep B, by which means I am enabled to adjust the opening between the instep and ledger-plate, and, by thus increasing or diminishing said opening, it is readily adapted to the cutting of the heavier or lighter cutting grasses, and avoids in a great measure the liability to choke.

G represents a screw-bolt passing down through the instep, spacing-block, and ledger-plate into the guard-finger, whereby they are all firmly secured to the main portion of said guard-finger.

By having the portions of the guard-finger which are subjected to wear removable, and which consist in the instep, ledger-plate, and cross-plate, they can be easily removed to be repaired or replaced by new ones without removing the guard-fingers from the cutter-bar, and also the ledger-plate easily and readily removed when required to be sharpened.

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

1. The combination, with the main portion A of a guard-finger, of an adjustable instep, B, substantially as and for the purpose set forth.

2. The combination of the main portion A of a guard-finger, provided with the slots *a* *a'*, and the removable instep B, provided with the tenon *b* and curved or hook-shaped portion *b'*, substantially as and for the purpose set forth.

3. The combination, with the main portion A and instep B, of the reversible spacing-block F, substantially as and for the purpose specified.

4. The combination of the main portion A of the guard-finger, provided with the slot *g*, of the cross-plate C, provided with the slot *g'*, and the removable ledger-plate E, provided with the extension *e'*, substantially as and for the purpose set forth.

5. The combination of the removable instep B, spacing-block F, ledger-plate E, and cross-plate C with the main portion A of a guard-

finger, substantially as and for the purpose specified.

6. The cross-plate C, provided with the series of recesses *c*, substantially as and for the purpose specified.

7. The removable instep B, provided with the recesses *f' f'*, and the spacing-block F,

provided with the projections *f f*, in combination with the main portion of a guard-finger, substantially as and for the purpose specified.

HARVEY RUSSELL FULLER.

Attest:

W. F. MORSELL,
M. M. ROHRER.