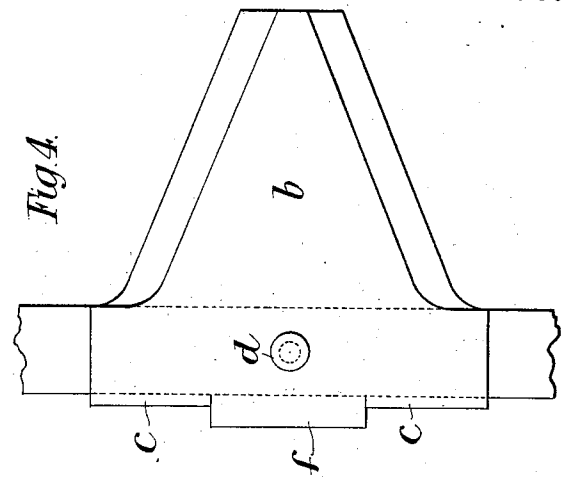
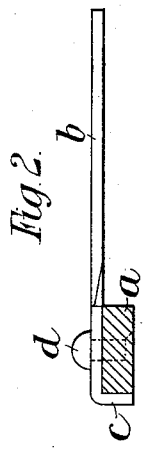
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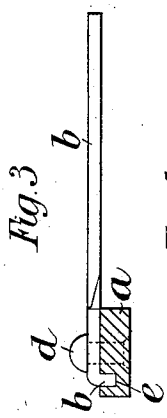
W. BRENTON.

SICKLE FOR MOWING OR REAPING MACHINES.

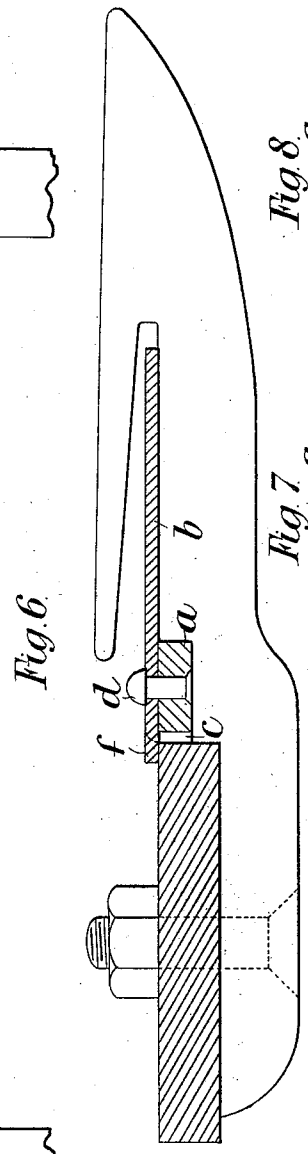
No. 589,157. Patented Aug. 31, 1897.

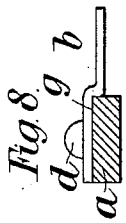


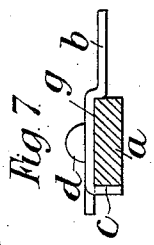


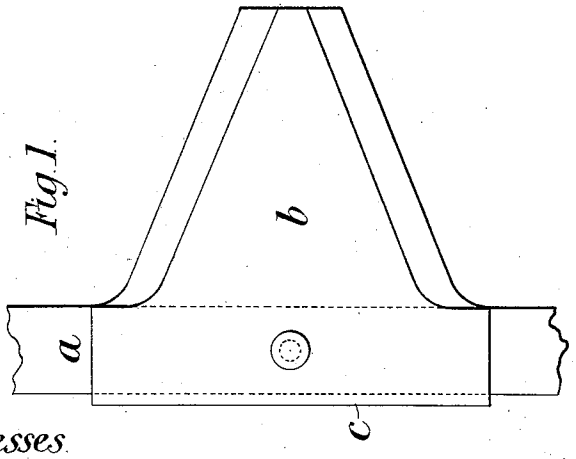












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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM BRENTON, OF ST. GERMAN, ENGLAND.

SICKLE FOR MOWING OR REAPING MACHINES.

SPECIFICATION forming part of Letters Patent No. 589,157, dated August 31, 1897.

Application filed August 8, 1896. Serial No. 602,147. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BRENTON, a subject of the Queen of Great Britain, residing at St. German, England, have invented new and useful Improvements in or Connected with Knives or Sickles for Mowing or Reaping Machines, of which the following is a specification.

My invention relates to knives or sickles for mowing or reaping machines and comprises a novel construction of the sections whereby they are stronger and can be more securely fixed than heretofore and whereby the knife-bar may be made lighter, as the sections can each be fixed into one rivet, thus requiring only half the number of holes which are necessary when two rivets are used.

According to my invention each section is adapted to grip against the bar, and for this purpose it is formed with a flange at an angle to the main part of the section, which flange engages with the back of the knife-bar or with a groove therein. In some cases the flange may be interrupted and have an intermediate flat portion which will rest on the finger-bar.

To enable my invention to be fully understood, I will describe the same by reference to the accompanying drawings, in which—

Figure 1 is a plan of a knife-section constructed according to my invention, together with the adjacent portion of the knife-bar; and Fig. 2 is a side elevation of the same. Fig. 3 is a view similar to Fig. 2, illustrating a modification of my invention; and Fig. 4 is a view similar to Fig. 1, illustrating another modification; and Fig. 5 is a side view of the modification shown in Fig. 4. Fig. 6 is a sectional elevation showing the knife illustrated in Figs. 4 and 5 in conjunction with the finger-bar and a finger. Figs. 7 and 8 are side views illustrating further modifications.

Similar reference-letters indicate corresponding parts throughout the drawings.

a is the knife-bar, and *b* is my improved knife-section, having the flange *c*, designed to bear against or engage with the said knife-bar.

As shown in Figs. 1 and 2, the flange *b* extends along the entire width of the section, a single rivet *d* being inserted through the section to hold it in position.

In the arrangement shown in Fig. 3 the flange *b* is not so deep as that shown in Fig. 2 and is inserted into a groove *e* in the finger-bar.

In the modification shown in Figs. 4 and 5 the arrangement is the same as that shown in Figs. 1 and 2, except that instead of turning down the back of the section for its whole width the central portion of the back is left projecting to form a lip *f*, which when the knife is in work will bear upon the back of the finger-bar, as shown in Fig. 6, and assist in maintaining the section in contact with the fingers. The finger-bar A is provided with fingers D, which have the usual recesses B in them, in which the knife-bar A reciprocates, and in rear of said recesses the finger-bar is provided with a horizontal face C, upon which the lip *f* rests and slides, thus throwing the knife-sections downwardly in close contact with the fingers D.

In the modification of my invention shown in Fig. 7 the section is represented as having a recess *g* stamped or otherwise produced on its under side, so as to form a shoulder which will grip against the front of the knife-bar.

When the sections are recessed, the flange at the back may be dispensed with, as shown in Fig. 8.

In all the modifications hereinbefore described only a single rivet *d* is necessary for fixing each section, but it will be obvious that two rivets may be used, as heretofore, if desired. It will also be obvious that sections constructed according to my invention can be applied as well to the under side of a knife-bar as to the upper.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The combination with the finger-bar having its fingers provided with recesses to receive the knife-bar, of the knife-bar located in said recesses, a knife-section formed of a single piece of material of uniform thickness secured to said knife-bar, and having its rear end projecting over the rear edge of said knife-bar, said projecting portion of the section being severed transversely of the knife-bar, one of said severed portions being bent downwardly to engage the rear face of said knife-bar and another of said severed por-

tions lying in the plane of the main portion of the section, and sliding upon the finger-bar, in rear of said recesses, substantially as described.

2. The combination with the finger-bar, having its fingers provided with recesses to receive the knife-bar, of the knife-bar located in said recesses, a knife-section formed of a single piece of material of uniform thickness secured to the knife-bar, having a downwardly-extending shoulder forward of said knife-bar and having its rear end projecting over the rear end of said knife-bar, said projecting portion being severed transversely of the knife-bar, one of said severed portions being bent downwardly into engagement with the rear edge of the knife-bar, and another of said severed portions engaging and sliding upon the finger-bar, in rear of said recesses, substantially as described.

3. As a new article of manufacture, a section-knife for mowing-machines, formed of a single piece of material of uniform thickness, having its rear portion severed, perpendicularly to its rear edge, one of said severed portions being bent downwardly and another of said portions being in the plane of the knife-bar-engaging portion of the section, substantially as described.

WILLIAM BRENTON.

Witnesses:
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