

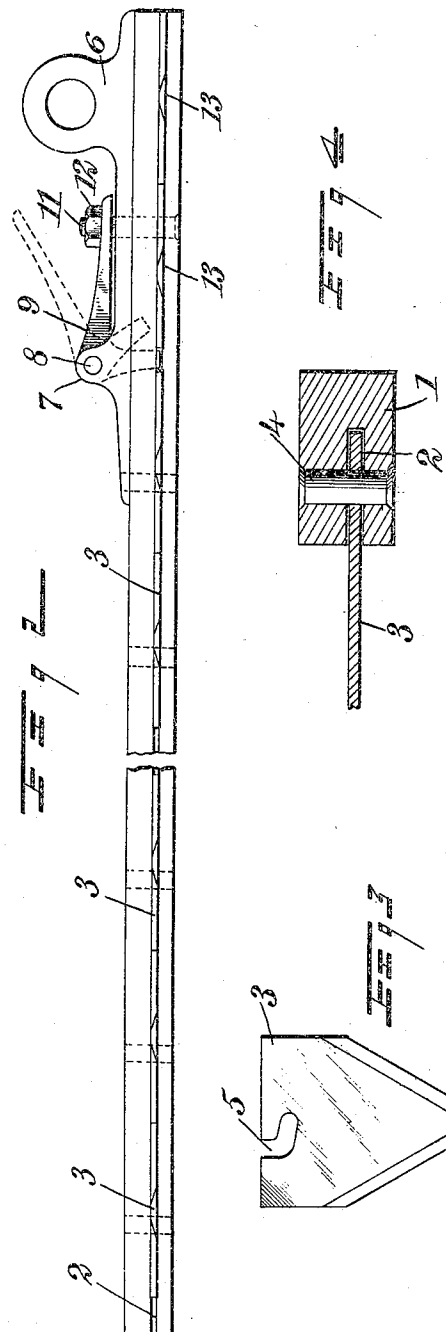
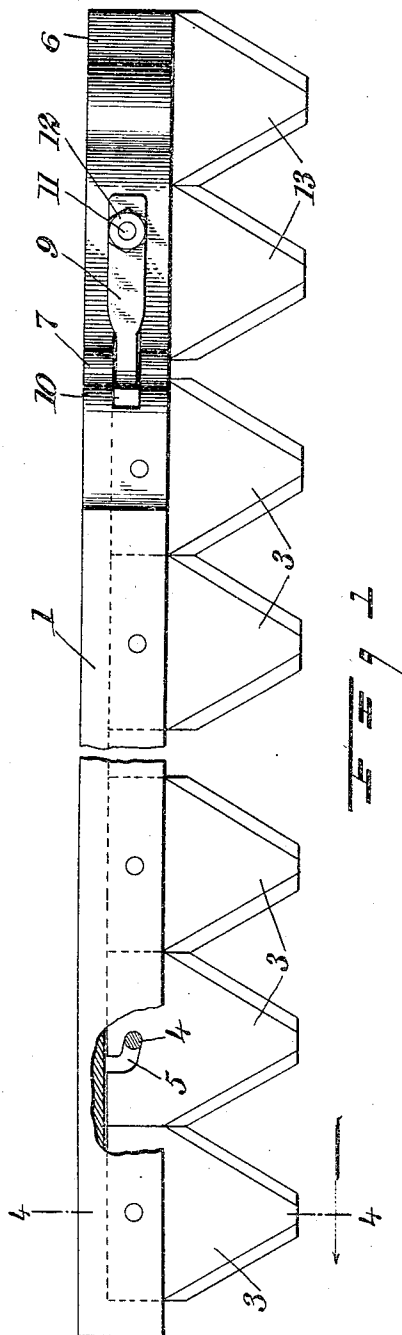
No. 792,582.

PATENTED JUNE 20, 1905.

W. H. & O. F. BRUSMAN.

SICKLE BAR.

APPLICATION FILED SEPT. 9, 1904.



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WILLIAM H. BRUSMAN AND OLIVER F. BRUSMAN, OF ELKHART, INDIANA.

SICKLE-BAR.

SPECIFICATION forming part of Letters Patent No. 792,582, dated June 20, 1905.

Application filed September 9, 1904. Serial No. 223,876.

To all whom it may concern:

Be it known that we, WILLIAM H. BRUSMAN and OLIVER F. BRUSMAN, citizens of the United States, and residents of Elkhart, in the county of Elkhart and State of Indiana, have invented a new and Improved Sickle-Bar, of which the following is a full, clear, and exact description.

This invention relates to sickle or cutter bars for mowing-machines; and its object is to provide a new and improved sickle-bar which is simple and durable in construction and arranged to detachably hold the individual knives in place thereon without fastening them with screws, bolts, or rivets, as is ordinarily the case, and at the same time to allow for expansion and contraction.

The invention further consists in the construction, combination, and arrangement of parts, as will be more fully hereinafter set forth, and specifically stated in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of our invention with part in section. Fig. 2 is an elevation of the same. Fig. 3 is a plan of one of the knives, and Fig. 4 is a section on the line 4-4 of Fig. 1.

The sickle-bar 1 has a longitudinal groove 2 formed in one side and extending throughout its length. This groove is of such width as to be exactly fitted by knives 3. At distances equal to the width of an individual knife 3 are secured pins 4 in the sickle-bar, and extending across the groove 2, near the middle of the rear part of each knife, is cut a bayonet-slot 5 of such size as to closely fit the pins 4. This slot is substantially cam-shaped in order to draw the knives 3 snugly against the bottom of the groove 2 when in a locked position. Near the inner end of the bar and integral with an eyepiece 6, to which the pitman of the machine is connected, are lugs 7. Through these lugs is passed a pin 8, upon which is pivotally supported a lever 9. The lever 9 is substantially L-shaped, and one end extends into a slot 10, formed in the sickle-bar, and is of such length that its lower end

coöperates with one of the knives when placed in its groove.

In order to secure the knives 3 in place, they are engaged with the pins 4 by beginning at the end opposite the lever 9. Each knife rests against the preceding one until the knife that is located nearest the lever is put in place. This last knife is forced toward the others by means of the lever 9, which is then adjustably secured in place by a bolt 11, secured on the sickle-bar, as shown. By adjusting a nut 12 on the bolt 11 allowance for expansion and contraction can readily be made.

Two knives 13 are shown as being secured in the ordinary manner in the groove 2 at the end where the eyepiece 6 is located; but these are not essential to our invention.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In a sickle-bar, the combination of a bar proper, having a longitudinal groove, knives mounted in said groove, a securing-pin in said groove for each knife, a cam-groove in each knife, to coöperate with one of said pins, and means for holding the knives with their grooves in engagement with the pins.

2. In a sickle-bar, the combination of a bar proper, having a longitudinal groove, knives mounted in said groove, a securing-pin in said groove for each knife, a cam-groove in each knife, to coöperate with one of said pins, and a lever for holding the knives with their grooves in engagement with the pins.

3. In a sickle-bar, the combination of a bar proper, having a longitudinal groove, knives mounted in said groove, a securing-pin in said groove for each knife, a cam-groove in each knife, to coöperate with one of said pins, a lever for holding the knives with their grooves in engagement with the pins, and positive means for locking said lever in position to hold the knives in place.

4. In a sickle-bar, the combination of a bar proper, having a longitudinal groove, knives mounted in said groove, a securing-pin in said groove for each knife, a cam-groove in each knife, to coöperate with one of said pins, a lever for holding the knives with their grooves

in engagement with the pins, and a bolt for locking said lever in position to hold the knives in place.

5 5. In a sickle-bar, the combination of a bar proper, having a longitudinal groove therein, pins in said groove and spaced a suitable distance, knives located completely in one plane and having cam-slots coöperating with said pins, and means for holding the knives with
10 the slots and pins engaged.

6. In a sickle-bar, the combination of a bar proper, having a longitudinal groove therein, pins in said groove and spaced a suitable distance, knives located completely in one plane
15 and having cam-slots coöperating with said pins, and adjustable means for holding the knives with the slots and pins engaged.

7. In a sickle-bar, the combination of a bar proper, having a longitudinal groove therein,

pins in said groove and spaced a suitable distance, knives located completely in one plane and having cam-slots coöperating with said pins, and a lever for holding the knives with the slots and pins engaged. 20'

8. In a sickle-bar, the combination of a longitudinally-grooved bar, knives in the groove, a cam-slot and pin connection between each of the knives and bar, and means for locking the knives in position with the pins in engagement with the cam-slots. 25

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses. 30

WILLIAM H. BRUSMAN.

OLIVER F. BRUSMAN.

Witnesses:

ALBERT R. BURNS,

FLORAN R. STUTSMAN.