(No Model.)

M. JARVIS. CUTTER BAR FOR REAPERS AND MOWERS.

No. 574,736.

Patented Jan. 5, 1897.

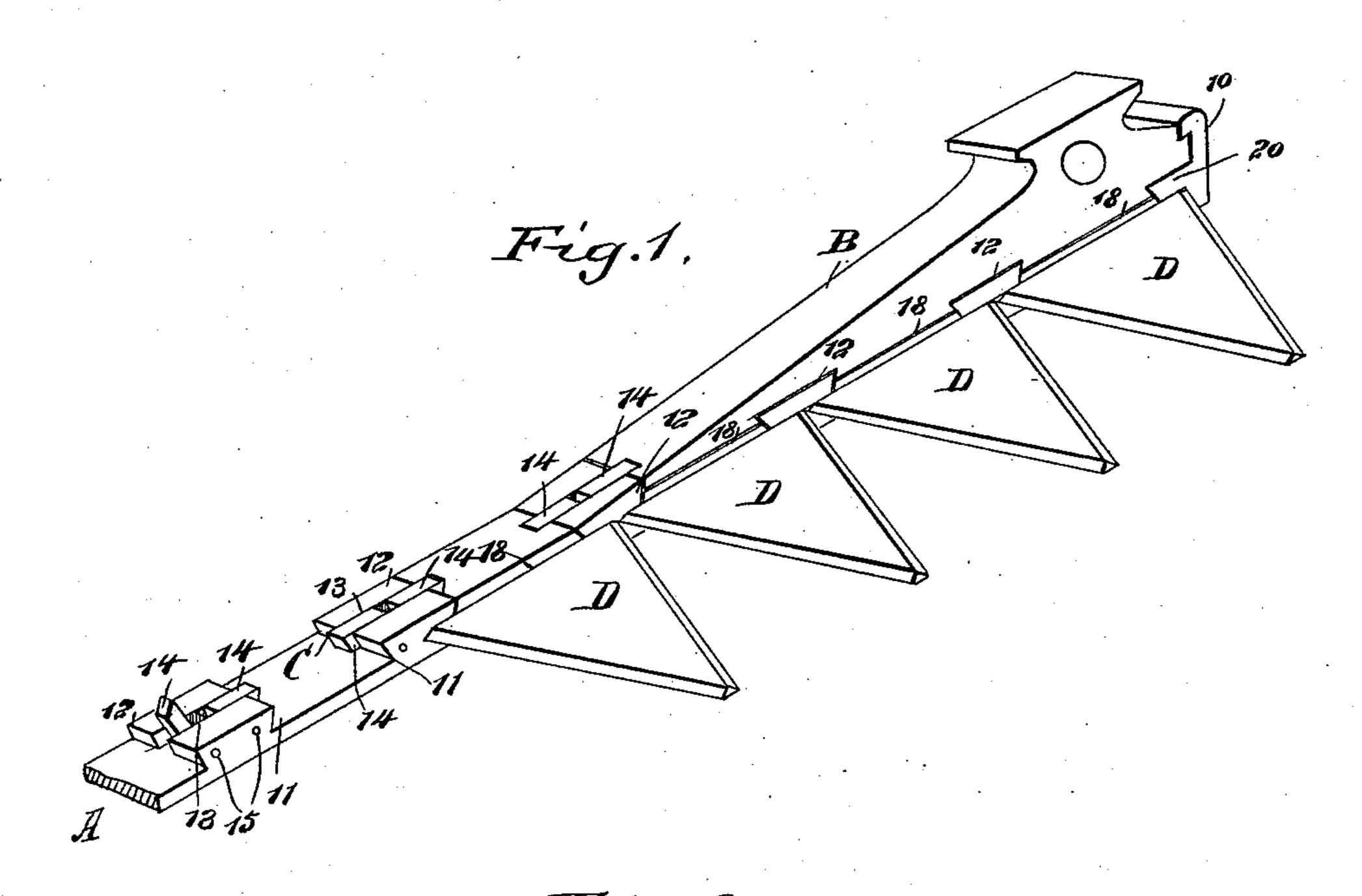
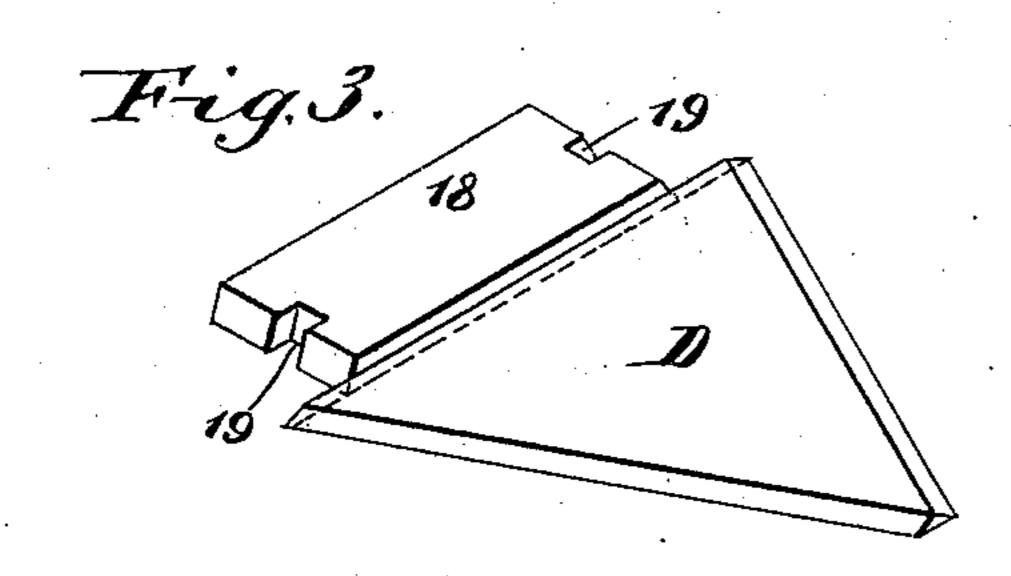


Fig. 2. 15.



United States Patent Office.

MOSES JARVIS, OF LEOTA, MISSISSIPPI.

CUTTER-BAR FOR REAPERS AND MOWERS.

SPECIFICATION forming part of Letters Patent No. 574,736, dated January 5, 1897.

Application filed August 31, 1896. Serial No. 604,458. (No model.)

To all whom it may concern:

Be it known that I, Moses Jarvis, of Leota, in the county of Washington and State of Mississippi, have invented a new and Improved Cutter-Bar for Reapers and Mowers, of which the following is a full, clear, and exact description.

The object of the invention is to so construct the cutter-bar and attach the knives thereto that the knives can be taken out and placed in the cutter-bar without removing said cutter-bar from the machine and whereby, furthermore, the knives may be secured to the cutter-bar or removed therefrom in an expeditious and convenient manner, each knife being provided with independent locking devices.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth,

and pointed out 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 cate corresponding parts in all the figures.

Figure 1 is a perspective view of a portion of a cutter-bar and knives attached thereto. Fig. 2 is a longitudinal vertical section through a portion of the cutter-bar and through the eyebar, and Fig. 3 is a detail perspective view of one of the knives.

In carrying out the invention the cutterbar A is provided at one of its ends, as is usual, with an upwardly-extending flange 35 having a return portion 10 at the top, and at intervals on the upper face of the cutter-bar knife-seats C are produced, each seat being a recess in the bar, made to form a dovetail outline 11, the recesses being separated by lugs 40 12, the ends of the lugs forming the end walls of the recesses. A longitudinal slot 13 is made centrally in each lug 12, extending through from end to end, except in the lug 20 at the return end of the cutter-bar, and in the slot 15 13 of each lug 12 two buttons 14 are pivoted, the said buttons extending beyond the dovetailed walls of the knife-seats C, and each pair of buttons are separated sufficiently, as shown in Fig. 2, to admit of either button of a set 50 being carried to a vertical position. Each button is provided with an independent pivot 15, located near its back, and each slot 13 is l

carried downward into the body of the bar or below the plane of the bottom of the knifeseats, as shown in Fig. 2, the bottom 16 of each 55 slot 13 being convexed, and each convexed bottom supports a spring 17, the ends whereof have bearing against the under face at the inner end portions of the buttons. The buttons are used as latches to lock the knives D 60 upon the bar.

The cutter-bar is covered for a portion of its length by the usual eyebar B, and this eyebar is introduced under the return portion of the flance 10 of the cutter-bar and is provided

flange 10 of the cutter-bar and is provided 65 with a series of dovetailed recesses b in its under face, adapted to receive the upper surfaces of the buttons or latches 14, over which the said eyebar is placed, and such of the latches or buttons that lie beneath the eyebar 70 are made thicker at that portion which lies within the slots 13 than the projecting portions, as is also shown in Fig. 2. The outer ends of the projections thus formed on the buttons are undercut to engage with the end 75 walls of the recesses in the eyebar, the latter being given a dovetail outline. The button which is located at the innermost and of the

which is located at the innermost end of the eyebar is made sufficiently thick to enter and slide in the said inner end of the eyebar, as 80 shown in Fig. 4. Therefore the buttons and the return-flange 10 of the eyebar serve to hold the eyebar in position.

The knives D are of the usual form, and each knife is provided with a shank 18 of suf-85 ficient length and width to enter a seat C, the ends of each knife-shank being inclined to meet the inclination at the ends of the seats. The shanks 18 of the knives are much thicker than the knives, being flush, however, with 90 the under faces of the knives, extending only

In the end of each shank 18 a slot 19 is made, of such shape and dimensions as to receive the ends of the buttons which extend 95 in the knife-seat to which the shank belongs. The buttons are first placed in an upright position. Then the shanks of the knives are entered into the seats C, and the buttons are then forced downward in a horizontal position, entering the slots in the ends of the shanks, the springs 17 serving to hold the buttons in either an upper or in a lower position. In order to prevent the eyebar from slipping

to the front or to the rear of the cutter-bar, one of the buttons enters the inner end of the eyebar, as above set forth, and at the opposite end of the eyebar a slot 21 is made in the 1 lug 20, and in this slot a bolt 22 is located having a beveled head, the shank of which bolt extends outward through the opening in the flange of the cutter-bar, and a spring 23 is coiled around the shank, bearing against the bolt and against the flange 10, as illustrated in Fig. 2. When the eyebar is to be removed, the bolt 21 is drawn outward and the button which engages with the eyebar is raised.

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

1. A cutter-bar provided with knife-seats having their end walls undercut, buttons piv20 oted on the cutter-bar and extending beyond the undercut walls of the knife-seats, and knives having shanks shaped to enter the said seats, the shanks being provided with recesses to receive the ends of the buttons extending within the seats, as and for the purpose set forth.

2. The combination, with the cutter-bar of mowers and reapers, the said cutter-bar being provided with knife-seats in its upper face cut to form a dovetail outline and separated by lugs, of buttons pivoted in the said lugs, extending through and beyond the undercut walls of the knife-seats, and knives provided with shanks which extend beyond the plane of their upper faces, the ends of the knife-shanks being beveled and provided with recesses in which the projecting ends of the buttons fit, as and for the purpose specified.

3. The combination, with the cutter-bar of a mower or a reaper, provided with knife-seats in its upper face, cut to form dovetail outlines, the surfaces supporting the said seats being

provided with slots which extend below the bottom of the seats, the said slots connecting with said seats, of springs fulcrumed upon 45 the bottom portion of the said slots, latches pivoted in the slots and having their ends bearing on opposite ends of the springs, the said latches extending out beyond the undercut walls of the knife-seats and having their 50 outer ends correspondingly inclined, and knives provided with shanks, fitted to the knife-seats and having recesses in their ends to receive the projecting portions of the latches, as and for the purpose set forth.

4. The combination, with a cutter-bar provided with knife-seats cut to form a dovetail outline, and knives provided with shanks fitted to the said seats and having recesses in their ends, of an eyebar, and pivoted latches 60 located between the knife-seats and extending therein and into the slots of the shanks of the knives, sundry of the said latches having undercut extensions which enter dovetail recesses in the aforesaid eyebar, substan-65 tially as described.

5. The combination, with a cutter-bar provided with knife-seats cut to form a dovetail outline, and knives provided with shanks, fitted to the said seats and having recesses in 70 their ends, of an eyebar, and pivoted buttons located between the knife-seats and extending therein and into the slots of the shanks of the knives, sundry of the said buttons having undercut extensions which enter dovetail re-75 cesses in the aforesaid eyebar, and springs having a fulcrum between opposing buttons, bearing upon the under faces thereof below their pivots, substantially as and for the purpose specified.

MOSES JARVIS.

Witnesses:

H. B. SHEYC, L. ELKAS.