

(No Model.)

G. M. WALKER & A. O. CALHOON.
GRAIN BAND CUTTER.

No. 515,066.

Patented Feb. 20, 1894.

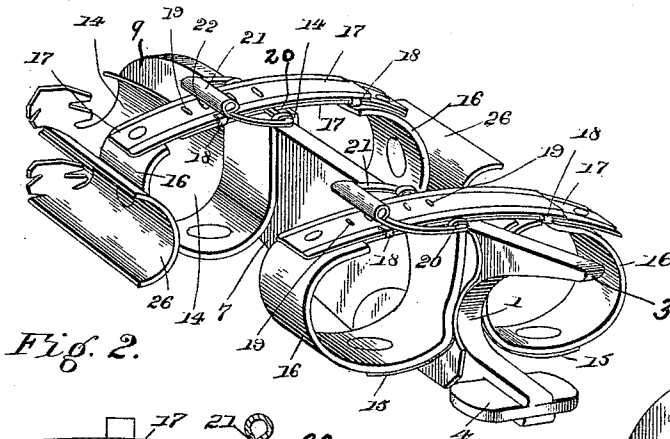
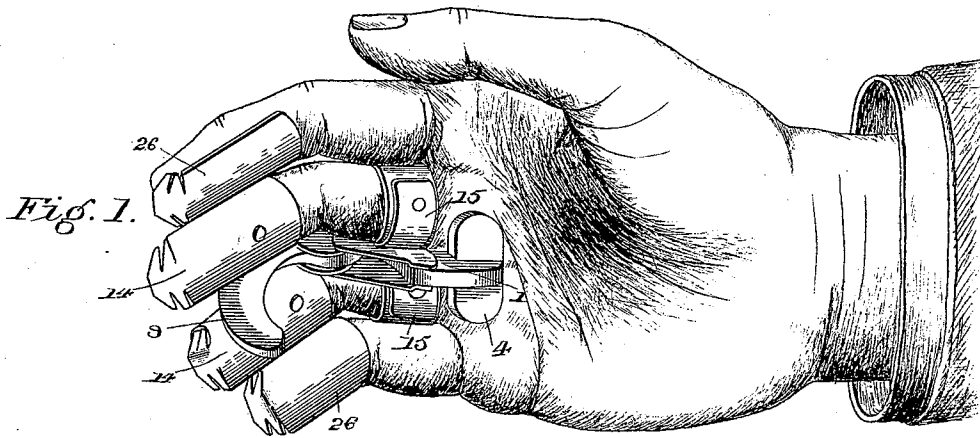


Fig. 4.

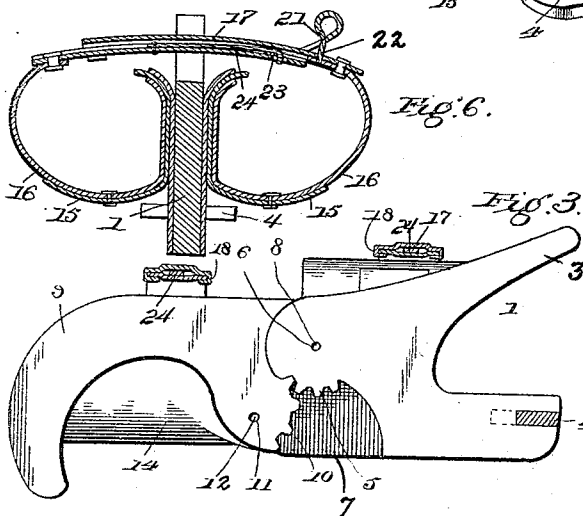
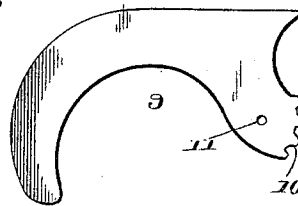
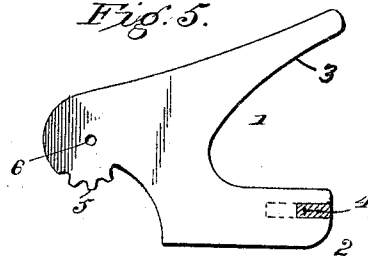


Fig. 6.

Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

GABRIEL M. WALKER, OF MACON, AND ALBERT O. CALHOON, OF VICTOR,
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GRAIN-BAND CUTTER.

SPECIFICATION forming part of Letters Patent No. 515,066, dated February 20, 1894.

Application filed May 3, 1893. Serial No. 472,927. (No model.)

To all whom it may concern:

Be it known that we, GABRIEL M. WALKER, residing at Macon, in the county of Macon, and ALBERT O. CALHOON, residing at Victor, in the county of Monroe, State of Missouri, citizens of the United States, have invented a new and useful Grain-Band Cutter, of which the following is a specification.

Our invention relates to improvements in grain-band cutters; the objects in view being to provide a cheap and simple hand device adapted to fit over the hand or fingers of the operator and be readily applied thereto, and to operate the knife therein through the medium of a slight motion given the hand, whereby said knife will be drawn across the band and sever the same previous to the feeding of the grain to the thrasher; and furthermore to so construct the device as not to interfere with the person using the same feeding the grain or to endanger cutting himself or his assistant during the operation.

With these objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective view of a device constructed in accordance with our invention, the same being shown in position upon a hand. Fig. 2 is a rear perspective of the same. Fig. 3 is a longitudinal sectional view. Figs. 4 and 5 are side elevations of the knife and yoke, respectively, of the device. Fig. 6 is a transverse sectional view of the device through one of the securing-straps and buckle.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing our invention we construct a yoke 1, somewhat of U-shape in that it comprises an inner terminal 2 and an outer terminal 3, said yoke being adapted to be embraced by the second and third fingers of the hand of the operator, and its terminals designed to embrace the hand of the operator between said fingers. The inner terminal 2 is provided with a flared bearing-portion 4 so as to give a broad bearing against the palm of the hand and thus prevent injury to the same. The outer end of the yoke is rounded

and provided with a segment 5 of teeth, and with a concentric perforation 6. The yoke has its outer end loosely embraced by an inverted U-shaped metallic guard 7, and a transverse pin 8 passes through the guard and the perforation 6 of the yoke.

9 designates a curved knife, the cutting edge of which is formed at the inner side of the knife, and the rear end of this knife is rounded and provided with a segment 10 of teeth, and furthermore with a perforation 11 concentric with said segment. A pin 12 passes through said perforation and through the terminals of the guard, while the segmental teeth of the knife engage with those of the yoke with which they correspond. It will thus be seen that the two members are pivoted eccentrically with relation to each other, and that inasmuch as their segmental teeth engage, a movement of one of the members will cause a contrary movement upon the part of the other member.

The guard has its opposite ends extended to form central finger-receiving sockets 14, and in rear of these sockets curved finger-receiving plates 15 are applied to the opposite sides of the yoke member. Secured to these plates and to these sockets are the outer ends of a pair of straps 16, and each strap has secured to it a curved metal plate 17, the plate of one strap overlapping that of the other, and said plates having inwardly turned keepers 18, whereby the plates are longitudinally slidable one upon the other. Each outer plate is provided with a series of perforations 19, and the inner plate with a pair of opposite bearing-ears 20, in which is loosely mounted a buckle-frame 21 which has an inwardly disposed tongue 22 adapted to engage with a convenient perforation in the upper plate. The transverse inner perforation of the buckle-frame is provided with a lug 23, and normally resting thereon is a flat spring 24 secured to the lower plate so that the buckle is maintained in a depressed or locked position. To the outer sides of the two sockets 14 additional sockets 26 are secured. This completes the construction, and the manner of using the device is as follows: The two central fingers, that is the second and third fin-

gers, of the hand are passed through the two loops and central sockets, and the first and last fingers rest in the outer sockets. When in this position, and the buckles have been
 5 adjusted to fit the fingers of the operator, it will be seen that by giving the fingers at their second joint a slightly inward movement, or, in other words, partially closing the hand, the knife will be given a double motion, that is it will roll upon its segment and
 10 also have a pivotal movement upon its pivoting pin, so that it will be thrown out in advance of the fingers and from between the terminals of the guard, and having been
 15 passed under a bale-band to be severed will operate in a shear-like manner thereon, severing the bale-band and permitting the grain confined thereby to be spread upon the feeder of a thrashing machine. When the hand is
 20 straightened out the knife is wholly between the central finger-sockets, and hence cannot either impede the operator from spreading and feeding the grain to the feeder, nor injure him or his assistant.

25 Various changes may be made in the details of construction of our invention, and we therefore do not limit the same to those particular details herein shown and described, but hold that we may vary the same to any degree and
 30 extent within the skill of persons conversant with the art.

Having described our invention, what we claim is—

1. In a bale-band cutter, the combination
 35 with a bifurcated yoke terminating at its outer end in a segmental head, a guard mounted over the yoke, a curved knife pivoted in the outer end of the guard and terminating at its inner end in a segmental head engaging
 40 the teeth of the yoke, and finger-holds secured to the opposite sides of the yoke and guard, substantially as specified.

2. In a bale-band cutter, the combination
 45 with a bifurcated yoke terminating at its outer end in a segmental head, an inverted U-shaped guard concentrically pivoted to the head, and a curved knife terminating at its

inner end in a segment engaging the segment of the yoke and also concentrically pivoted to the guard, of finger-sockets secured to the
 50 guard and extending from the front end of the guard at opposite sides of the yoke, adjustable straps connected at their inner ends, and at their outer ends to the outer sides of the sockets, and plates and finger-sockets secured to the outer sides of those finger-sock-
 55 ets carrying straps, substantially as specified.

3. In a bale-band cutter, the combination with a bifurcated yoke terminating at its outer end in a toothed segment, a guard embracing and pivoted to the yoke concentric with the segment, and a curved knife pivoted to the guard and having a concentric segment engaging the teeth of the other segment, curved plates secured to the opposite sides of
 60 the yoke, central finger-sockets secured to the front ends of the guard, side finger-sockets secured to the central finger-sockets, short leather straps connected to the outer sides of the finger-plates and central finger-sockets,
 70 sheet metal plates overlapping each other and connected to the inner ends of the leather straps, said plates having keepers engaging each other and therefore loosely connected, perforations in the upper plate, bearing-ears
 75 in the lower plate, buckles pivoted in the bearing-ears and having lugs for engaging the perforations and having their transverse ends provided with projections, and flat springs secured to the inner plates and bearing on
 80 said projections, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

GABRIEL M. WALKER.

ALBERT O. CALHOON.

Witnesses to the signature of Gabriel M. Walker:

A. R. POPE,

A. M. PARRISH.

Witnesses to the signature of Albert O. Calhoon:

E. A. WALES,

JOHN W. STOKES.