

No. 839,850.

PATENTED JAN. 1, 1907.

C. L. HUMMEL.
CUTTING APPARATUS FOR HARVESTERS.
APPLICATION FILED MAR. 29, 1906.

Fig. 1.

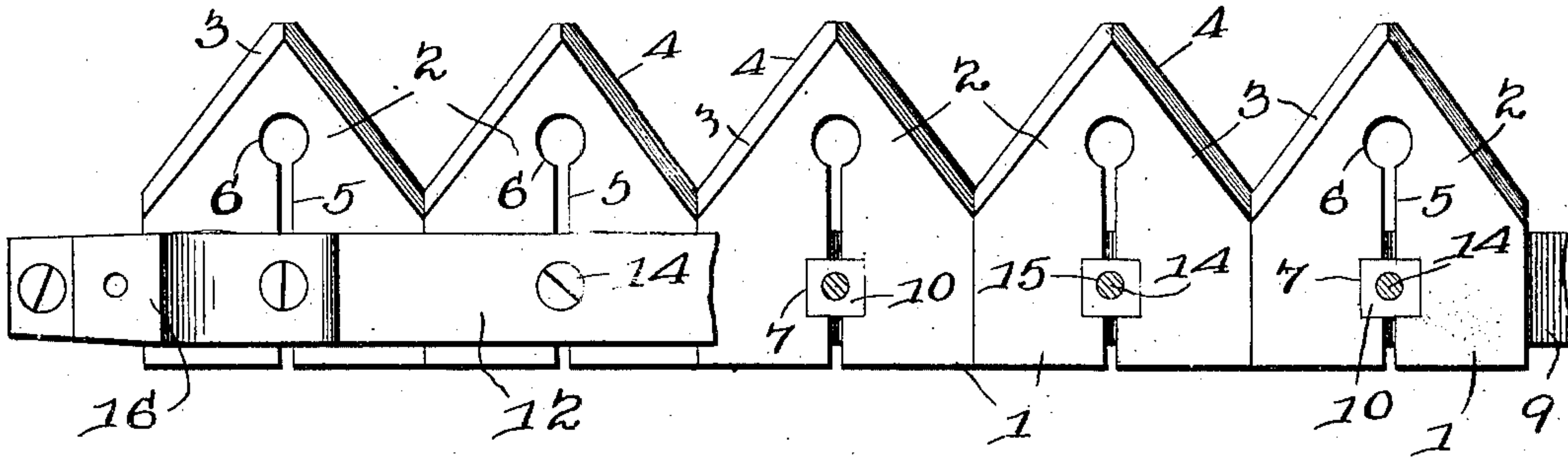


Fig. 2.

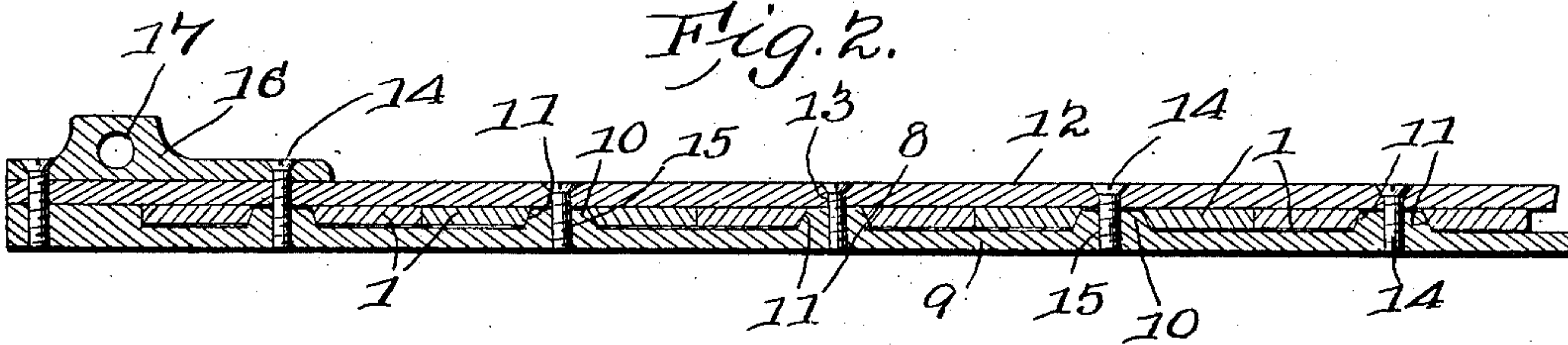


Fig. 3.

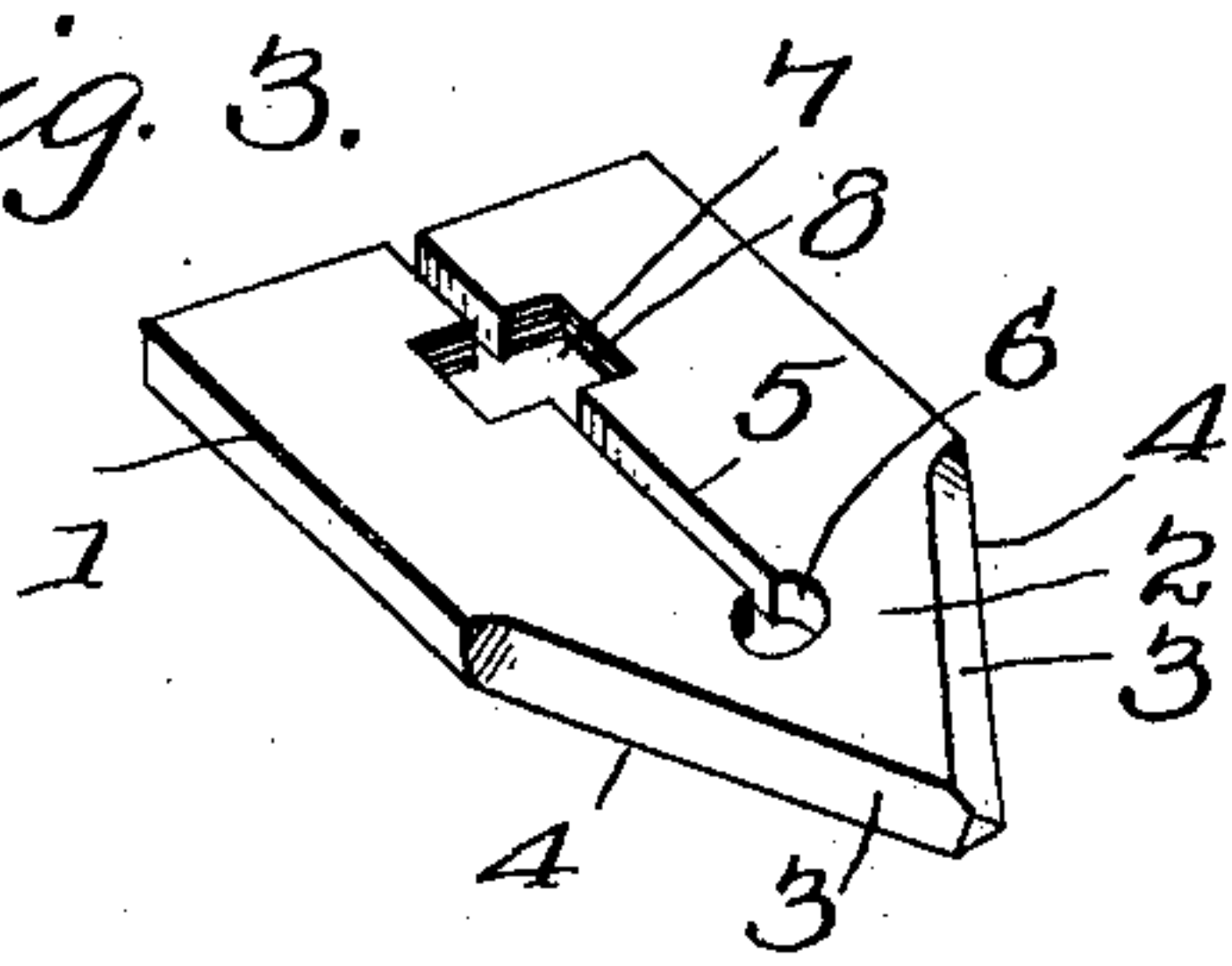
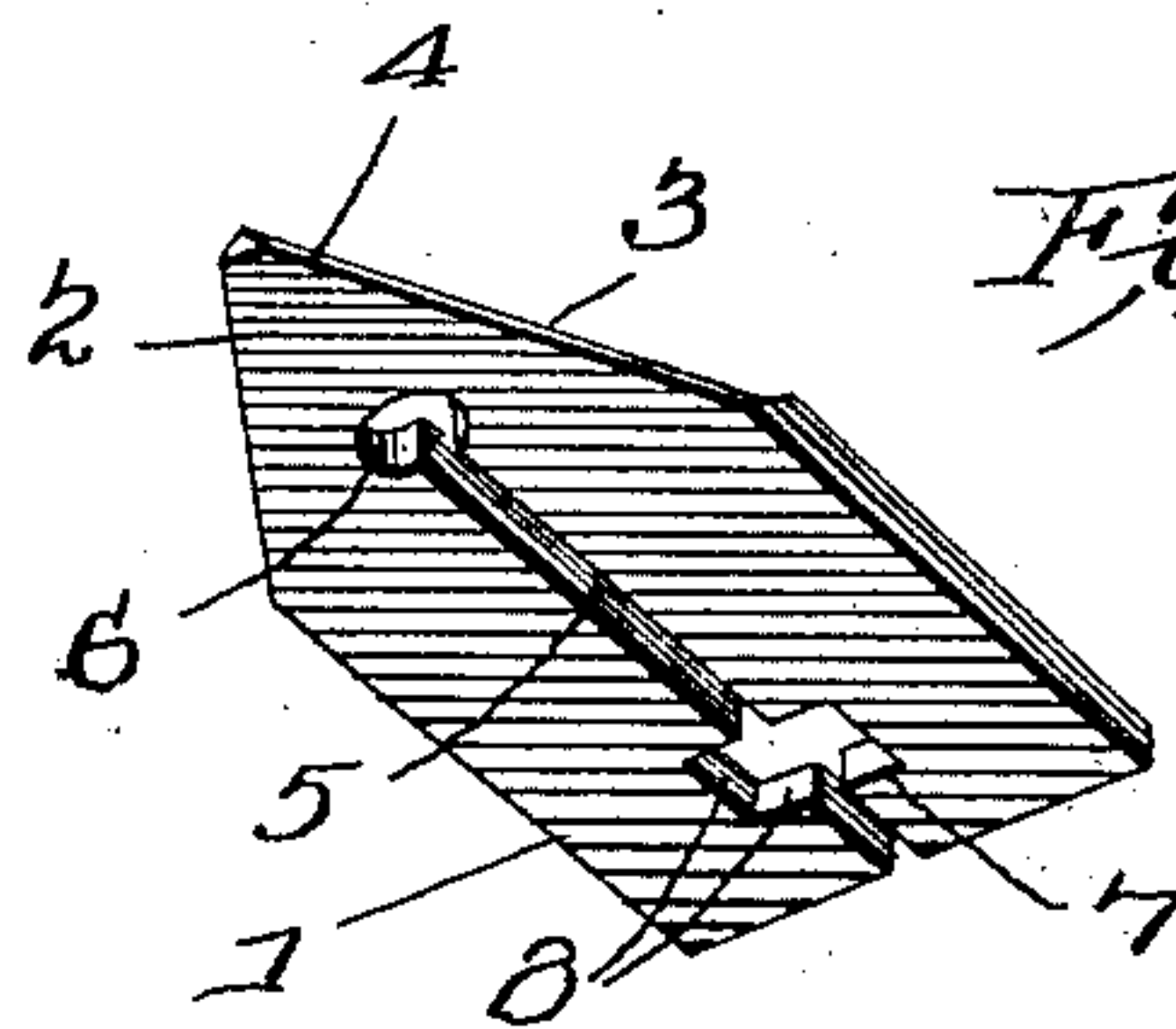


Fig. 4.



WITNESSES:

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CUTTING APPARATUS FOR HARVESTERS.

No. 839,850.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed March 29, 1906. Serial No. 308,806.

To all whom it may concern:

Be it known that I, CHARLES L. HUMMEL, a citizen of the United States, residing at Flatrock, in the county of Seneca and State of Ohio, have invented a new and useful Cutting Apparatus for Harvesters, of which the following is a specification.

This invention relates to cutting apparatus for harvesters, and among the objects of the invention are to provide improved means for connecting the individual knives or blades with the sickle-bar in such a manner that they shall be held securely and free from vibration.

Other objects of the invention are to so simplify and improve the general construction of the device as to present an article which shall possess superior advantages in point of simplicity, durability, and general efficiency.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations, and modifications within the scope of the invention may be made when desired.

In the drawings, Figure 1 is a top plan view of part of a sickle-bar having a plurality of cutting-blades connected therewith, a portion of the clamping-bar having been removed. Fig. 2 is a longitudinal sectional view showing part of a sickle-bar having a plurality of blades connected therewith and showing the clamping-bar in position. Fig. 3 is a perspective view of one of the blades detached. Fig. 4 is a similar view showing the blade inverted.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

The knife or cutter which constitutes a part of the improved cutting apparatus is composed of a body portion 1, having a forwardly-extending approximately triangular blade portion 2, the converging sides of which are beveled, as at 3, to form the cutting edges

4. The knife member is provided with a longitudinal slot 5, extending through the body portion and into the triangular blade, where it terminates in an approximately circular aperture 6. The side walls of the slot are provided with notches 7, formed in the body portion 1, the side walls of said notches being beveled in a downward and outward direction, as will be clearly seen at 8 in Fig. 2 of the drawings.

The sickle-bar or cutter-bar 9 is provided upon its upper side with a plurality of studs or bosses 10 10, which are of suitable size and shape to engage the openings or apertures formed by the slots 5 and notches 7 in the bodies of the knives or cutting members, said lugs or bosses having beveled sides 11 to engage the beveled side walls 8 of the notches. The parts are so proportioned that when the blades or cutting members are placed upon the sickle-bar and the individual blades are forced downward upon the individual studs the side edges of the bodies of the cutting members will be forced into intimate contact with each other, the side edges of each cutting member being forced or sprung slightly in an outward direction by the engagement of the beveled studs or bosses 10 with the correspondingly-beveled edges of the notches in the bodies of the cutting members.

To properly assemble the parts, a clamping-plate 12 is provided, said clamping-plate being provided with a plurality of apertures 13 for the passage of connecting members, such as screws 14, the points of which engage the threaded apertures 15, that extend through the bosses 10 and through the body of the sickle-bar. When the parts are assembled and the screws are tightened, the cutting members will be forced into intimate contact with each other and with the holding members—that is to say, with the sickle-bar and with the clamping-plate—and the parts will be held securely in the proper relation to each other without danger of becoming loose or shaky.

One of the screws or connecting members 14 may be utilized in part for the securement of the knuckle 16, which is provided with an eye 17, forming a bearing for the pitman, whereby the sickle-bar is in practice operated.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this

invention will be readily understood. The construction is simple, inexpensive, and efficient for the purposes for which it is designed.

Having thus described the invention, what is claimed is—

1. In cutting apparatus for harvesters a cutting member having a slot with parallel edges extending through the body into the blade portion, and a securing means located
10 in said slot.

2. In cutting apparatus for harvesters, a cutting member having a slot extending through the body into the blade portion and terminating in an enlargement or aperture.

15 3. A cutting member having a slot extending through the body into the blade portion and provided with lateral notches having beveled walls.

20 4. A sickle-bar having beveled bosses, in combination with cutting members having

slots provided with terminal enlargements and lateral beveled notches, a clamping-bar, and connecting and tightening means.

5. A sickle-bar having beveled bosses provided with threaded recesses, in combination 25 with cutting members having slots provided with terminal enlargements and lateral beveled notches, a clamping-bar having apertures, and connecting-screws extending through the apertures and engaging the 30 threaded recesses in the bosses upon the sickle-bar.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES L. HUMMEL.

Witnesses:

J. P. VICKERY,
J. A. BITTING.