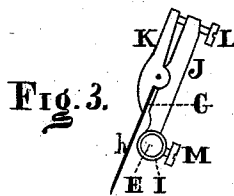
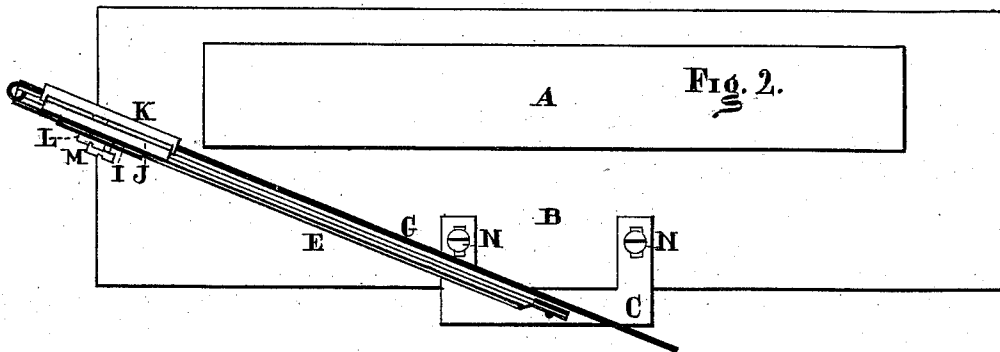
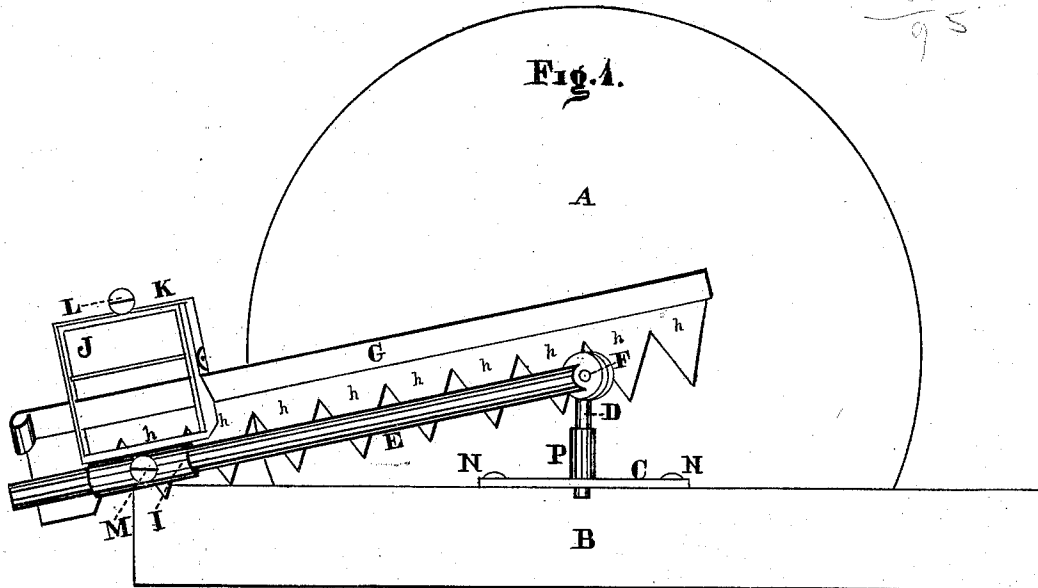


A. D. HOFFMAN.
Sickle Grinder.

No. 201,610.

Patented March 26, 1878.



WITNESSES

R. B. Moorey.
Adolf Hille

INVENTOR

Austin D. Hoffman.
By G. L. Chapin.
Atty.

UNITED STATES PATENT OFFICE.

AUSTIN D. HOFFMAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO JOHN J. BAKER
AND JAMES I. WALLACE.

IMPROVEMENT IN SICKLE-GRINDERS.

Specification forming part of Letters Patent No. **201,610**, dated March 26, 1878; application filed
February 12, 1878.

To all whom it may concern:

Be it known that I, AUSTIN D. HOFFMAN, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Sickle-Grinders for Harvesters, of which the following is a specification, reference being had to the accompanying drawings, making a part of this specification, and illustrating the improvement.

The object of the present invention is to provide means for turning the sickle-clamp in a vertical plane to such an extent as may be required to grind the knives of the sickle on any desired bevel or angle, and to grind the knives on the same bevel that they may have had given to them. This I accomplish by means of a rod jointed to a vertical pivot, so as to have any desired movement in a vertical plane, the pivot being placed centrally on the grindstone-frame, to give the rod any desired movement in a horizontal plane. The rod carries a sickle-clamp, by which the sickle may have the teeth ground consecutively and at any suitable bevel.

In the drawings, Figure 1 is a longitudinal elevation of a sickle-grinder embodying my improvement; Fig. 2, a top or plan view thereof. Fig. 3 is an end elevation of the round rod or pipe with sickle-clamp thereon.

A represents an ordinary grindstone, and B the frame on which it is mounted. C represents a horizontal frame, which is slotted on its inner ends, that it may be adjustable parallel to the grindstone-shaft, and held in position, when so adjusted, by set-screws N.

A hollow socket, P, is formed on the central part of this frame, to support the pivot D, to which the round rod E is jointed at F. This

rod, in the present instance, is represented as hollow; but a solid rod will answer the purpose, gas-pipe one inch in diameter being preferable, because it is so much lighter, whereby a greater bearing-surface in a given weight of metal is attained.

I represents a sleeve, which is fitted to both turn and slide on the rod E, a set-screw, M, being tapped into the sleeve to hold it in a desired position.

The clamp J K is of the ordinary two-jaw form, and holds the sickle-bar in place for grinding the knives *h h*.

The frame C is a permanent fixture on the grindstone-frame, or it may be; and the pivot D is removable with the rod E and clamp thereon, that the grindstone may be free for other uses.

To regulate the device so as to grind any suitable bevel on the teeth *h*, adjust the frame C to or from the stone A; and to bring the whole length of the tooth against the flat side of the stone, loosen the set-screw M and turn the sleeve I on the rod E till the proper position is attained, and then fasten the screw.

I claim as new and desire to secure by Letters Patent—

The vertical central pivot D, having a bearing in an adjustable socket, P, in combination with the rod E, jointed centrally to the pivot D and relatively to the axis of the stone A, and with the clamp J K, provided with set-screws, as and for the purpose set forth.

AUSTIN D. HOFFMAN.

Witnesses:

G. L. CHAPIN,
F. J. SMITH.