

F. H. WOLKENHAUER.

CUTTING APPARATUS FOR HARVESTER.

No. 172,288.

Patented Jan. 18, 1876.

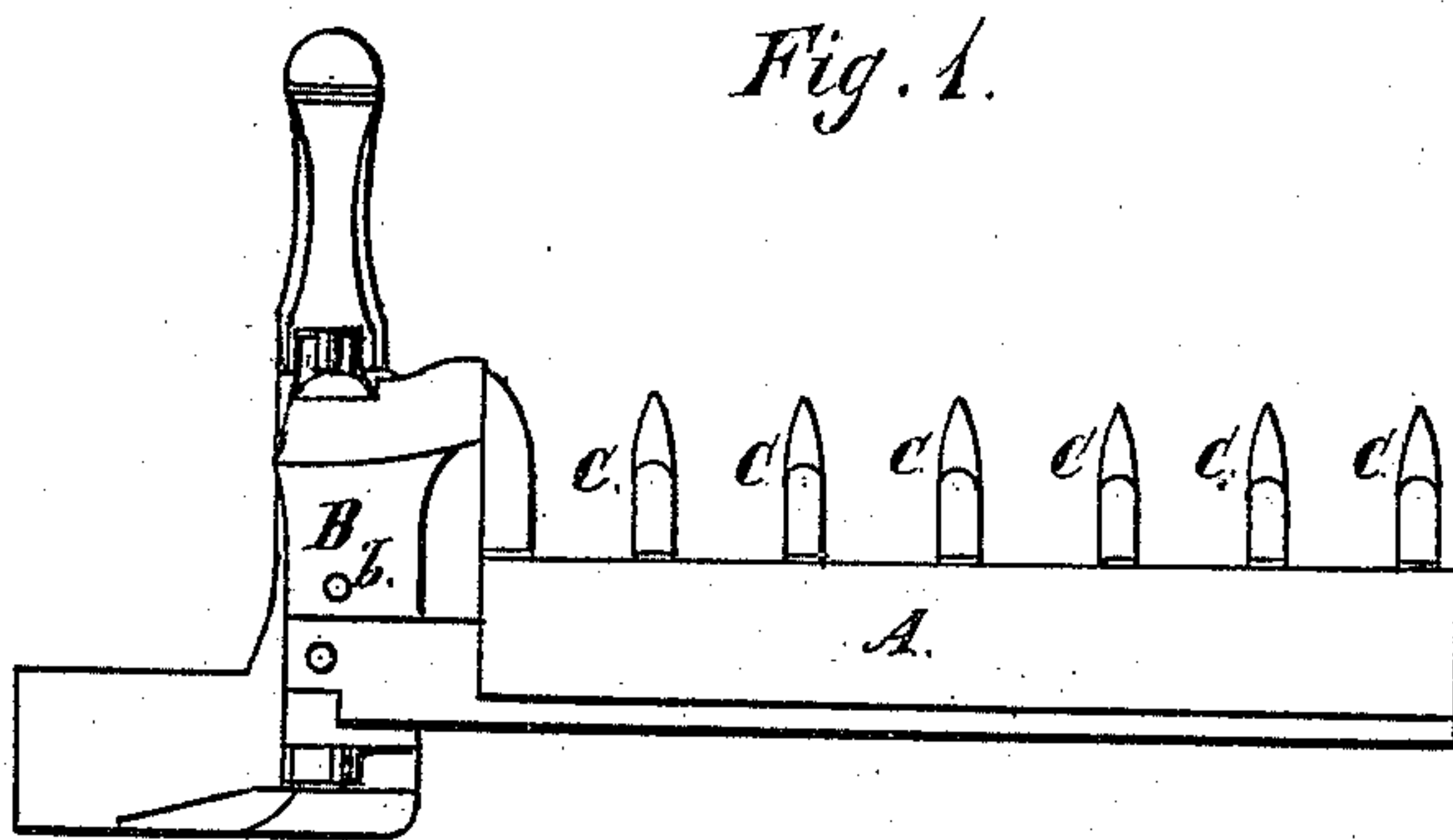


Fig. 2.

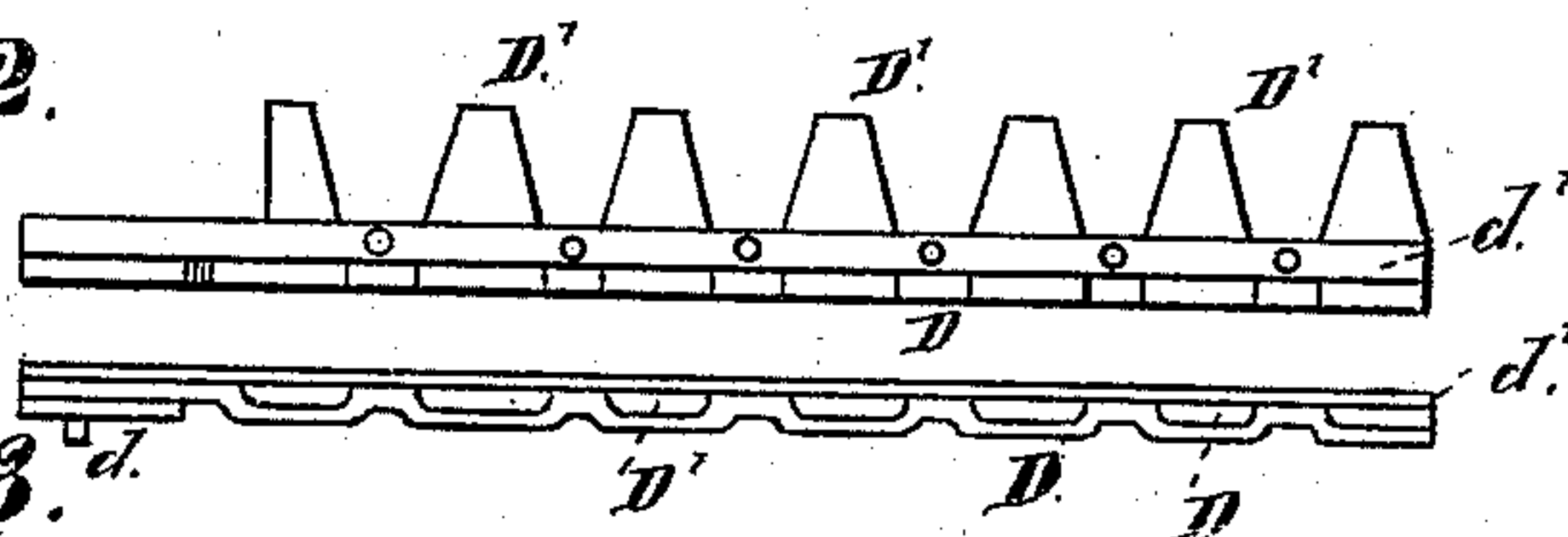


Fig. 3.

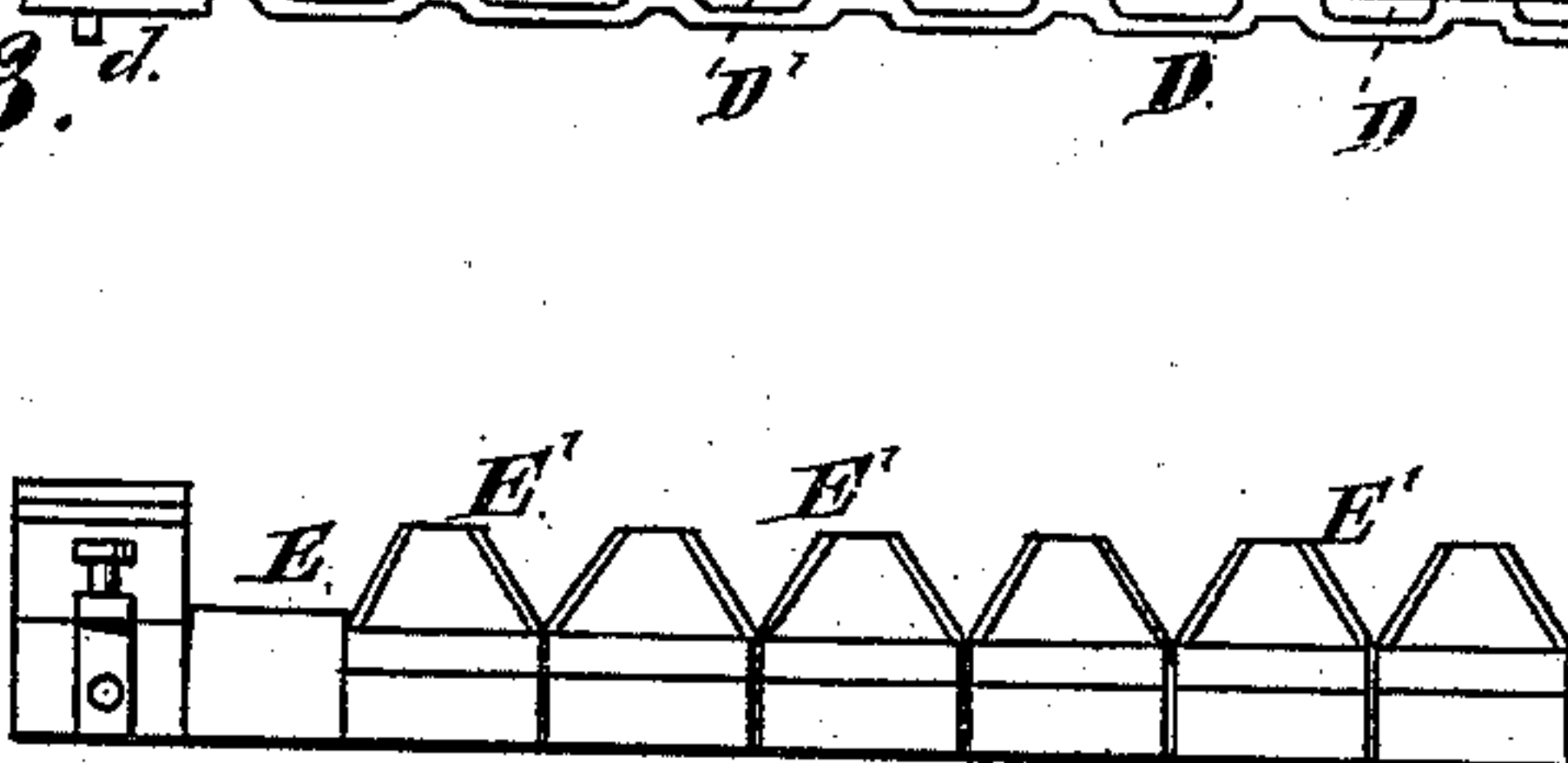


Fig. 4.

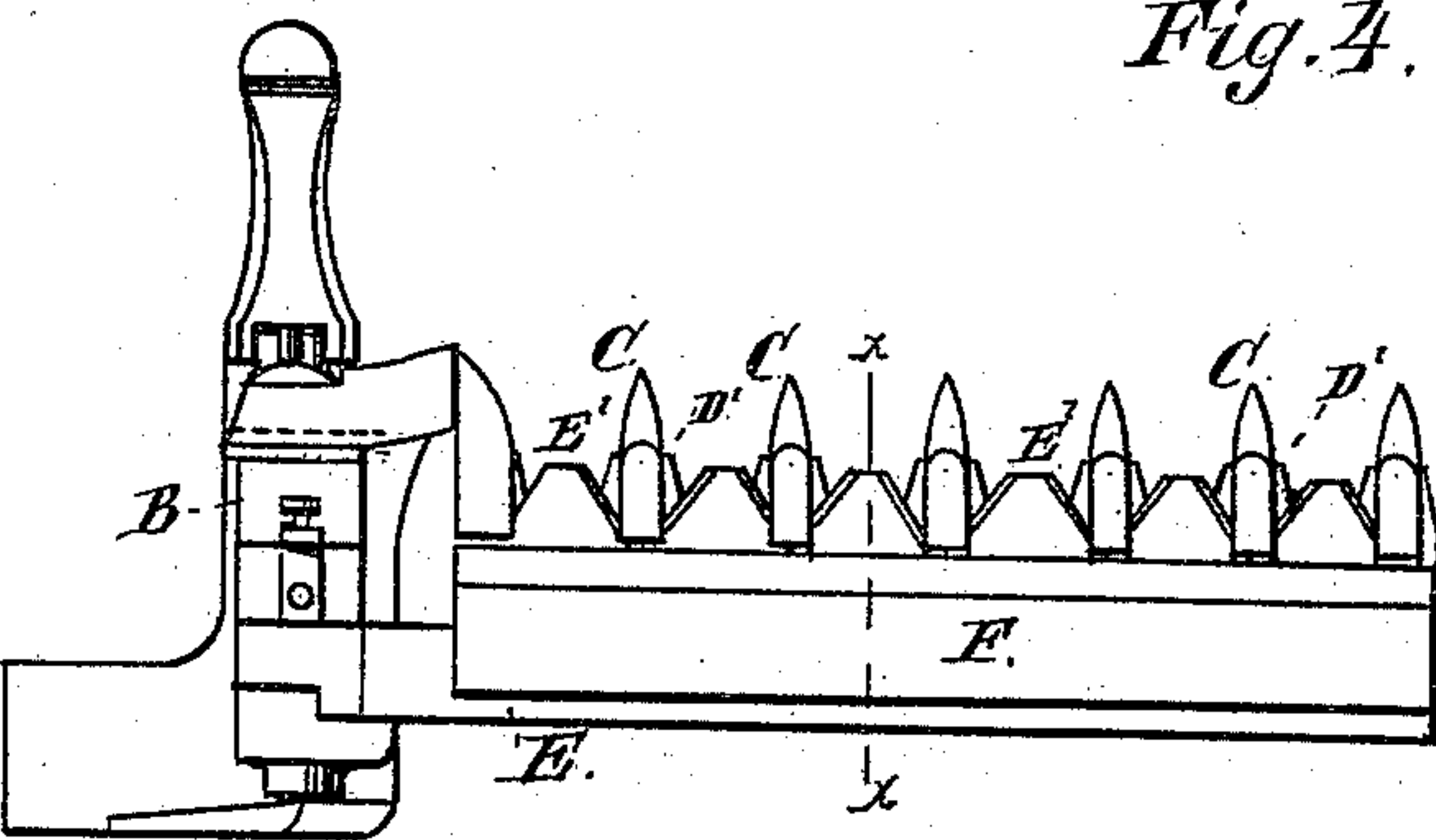


Fig. 5.

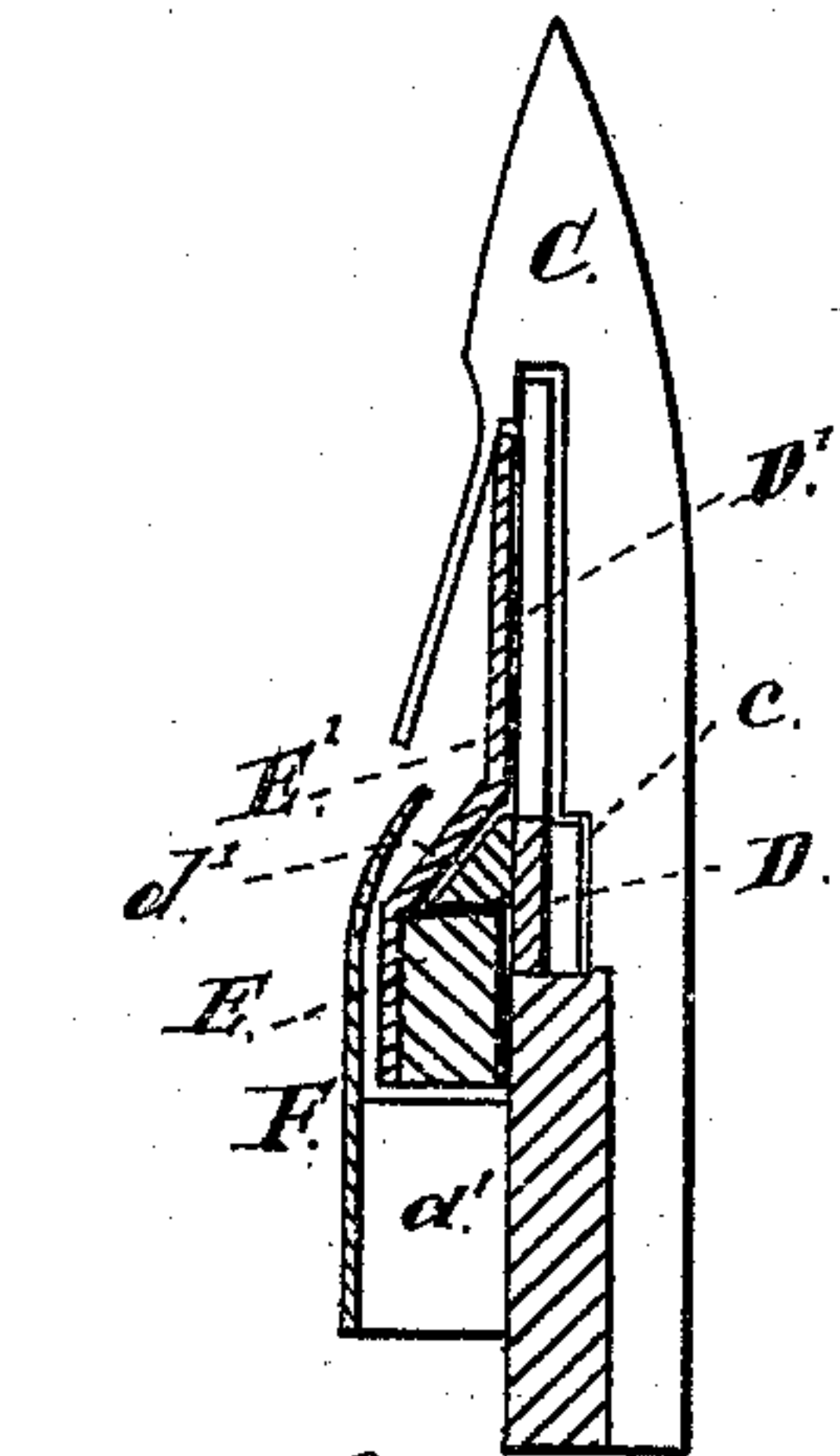


Fig. 6.

Witnesses:
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UNITED STATES PATENT OFFICE.

FRIEDRICH H. WOLKENHAUER, OF BENSONVILLE, ILLINOIS.

IMPROVEMENT IN CUTTING APPARATUS FOR HARVESTERS.

Specification forming part of Letters Patent No. **172,288**, dated January 18, 1876; application filed November 20, 1875.

To all whom it may concern:

Be it known that I, FRIEDRICH H. WOLKENHAUER, of Bensonville, in the county of Du Page and State of Illinois, have invented a new and useful Improvement in Harvester Cutting Apparatus, which is fully described in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 is a plan view of the inner shoe and finger-bar; Fig. 2, a plan view, and Fig. 3 a rear elevation, of the ledger-blade bar, with the blades attached; Fig. 4, a plan view of the cutter-bar and knives attached; Fig. 5, a plan view of the entire cutting apparatus as arranged for use; and Fig. 6, a sectional view of the same upon an enlarged scale, and taken through the line *x x*, Fig. 5.

The object of my invention is to provide for the ready removal or replacement of the bar to which the ledger-blades are all attached, and at the same time to provide a proper guide and support for the cutter-bar and knives.

The invention consists in constructing the ledger-blade bar with a stud upon its under side, which fits into a corresponding hole in the shoe, and thereby holds the bar in place; and also in attaching a triangular strip upon the top of the ledger-blade bar, above the blades, which serves as a guide and support to the cutter-bar and knives.

In the drawings, A represents the finger-bar, which is attached to the shoe B in any suitable way, and to which the ordinary fingers C are attached.

Usually the ledger-blades are attached independently to the fingers or finger-bar. I attach all of these blades to one bar, D, which is depressed at suitable intervals to form recesses for the reception of the blades D', so that their upper faces will be in the same plane with the upper surface of the bar.

To the lower side of the ledger-blade bar I attach, in any suitable way, a small stud, *d*, and upon the upper side I fix a small strip of metal, *d'*, which is of triangular shape, and is firmly riveted to the bar D. The cutting-knives E' are riveted in the usual way to the cutter-bar E; but the knives are bent downward and forward, so as to form, in connec-

tion with the bar, a continuous triangular groove, as is clearly shown in Fig. 6. In the shoe a small hole, *b*, is drilled.

The operation of my invention is as follows: The bar D, which carries the ledger-blades, is inserted in its place, resting in recesses *c*, made in the fingers C for its reception, and the stud *d* is inserted in the hole *b* in the shoe, the bar D springing sufficiently for this purpose. The ledger-blades are thus held securely in position, the blades themselves resting upon the lower face of the slotted fingers. The cutter-bar is then slipped in behind the strip *d'*, the bend in the knives being such as to closely fit the inclined face of this strip, as shown in Fig. 6.

It will be seen, therefore, that the strip *d'* serves as a guide to the cutter-bar and a partial support for the knives.

To the finger-bar metallic blocks *a'* are attached, at suitable points upon which is placed a plate, F, which extends over and covers the cutter-bar, serving as a holding-plate and protection for the latter.

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

1. The ledger-blade bar D, provided with a stud, *d*, for the purpose of fastening the bar to the shoe, substantially as described.

2. The triangular strip *d'*, fastened to the ledger-blade bar D, and operating as a guide to the cutter-bar, substantially as described.

3. The combination of the triangular strip *d'*, cutter-bar E, and knives E', bent as described, substantially as and for the purposes set forth.

4. The combination, substantially as described, of the ledger-blade bar D, strip *d'*, cutter-bar E, and knives E', as and for the purposes set forth.

5. The combination, substantially as described, of the ledger-blade bar D, carrying the triangular strip *d'*, cutter-bar E, knives E', bent as described, and plate F, as and for the purposes set forth.

FRIEDRICH H. WOLKENHAUER.

In presence of—

HEINRICH F. BRUNS,
L. A. BUNTING.