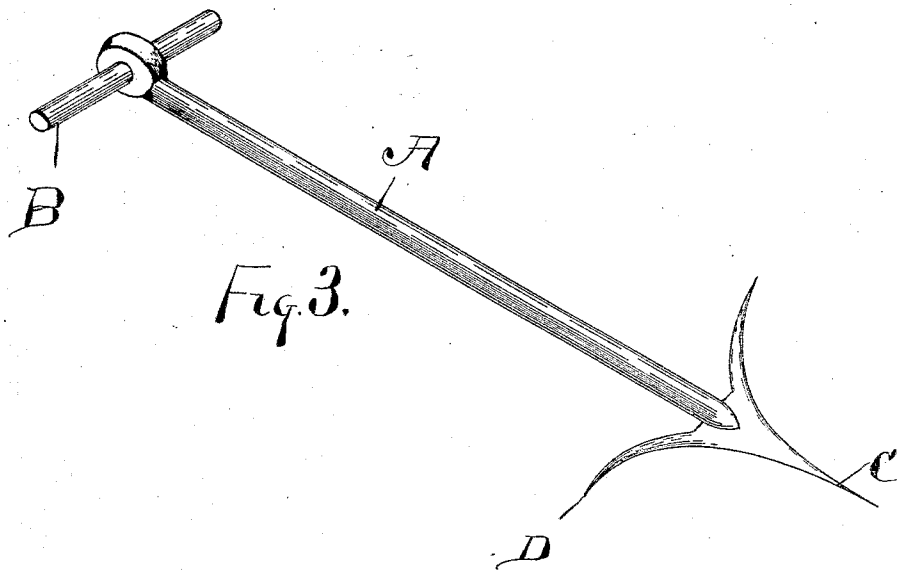
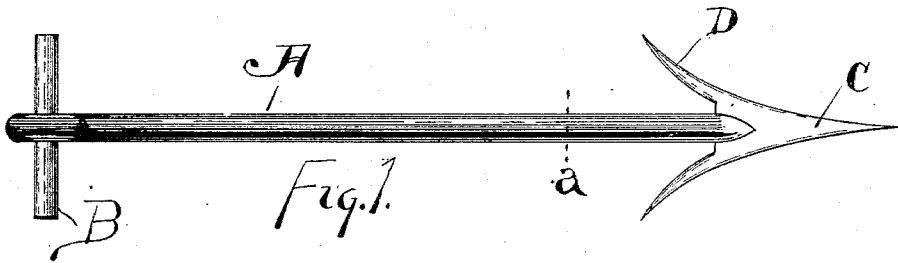


(No Model.)

J. A. MCGREEVEY.
STRAW HARPOON.

No. 563,790.

Patented July 14, 1896.



Witnesses:
E. P. Shipley
M. S. Borden

John A. McGreevey
Inventor
by *James M. See*
Attorney

UNITED STATES PATENT OFFICE.

JOHN A. MCGREEVEY, OF BURROWS, INDIANA.

STRAW-HARPOON.

SPECIFICATION forming part of Letters Patent No. 563,790, dated July 14, 1896.

Application filed January 29, 1896. Serial No. 577,324. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. MCGREEVEY, of Burrows, Carroll county, Indiana, have invented certain new and useful Improvements in Straw-Harpoons, of which the following is a specification.

This invention relates to a harpoon for use in withdrawing straw from the stack, and it will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of my improved harpoon; Fig. 2, a transverse section on line *a*, and Fig. 3 a perspective view.

In the drawings, A indicates a metal stem; B, a cross-handle at one end thereof; C, a sharp spear-head on the other end of the stem, and D the barbs or flukes of the spear-head, projecting outwardly and backwardly from the point thereof and having their extremities spirally curved.

The operator is to stand beside the straw-stack and insert the implement, and, by a twisting motion, withdraw it with its gathered mass of straw.

I claim as my invention—

1. As a new article of manufacture, a harpoon consisting of a head having concave edges and diverging barbs constituting spirally-arranged continuations of the concave edges of the head.

2. As a new article of manufacture, a harpoon consisting of a head having diverging concave edges and pointed diverging spirally-arranged barbs curved to constitute continuations of the concave edges of the head in like degree of curvature.

JOHN A. MCGREEVEY.

Witnesses:

M. J. MCGREEVEY,
JOHN ALBERT.