

J. M. Lemon.

Hoisting Bucket.

N^o 9,351.

Patented Jan. 15, 1869.

Fig. 1.

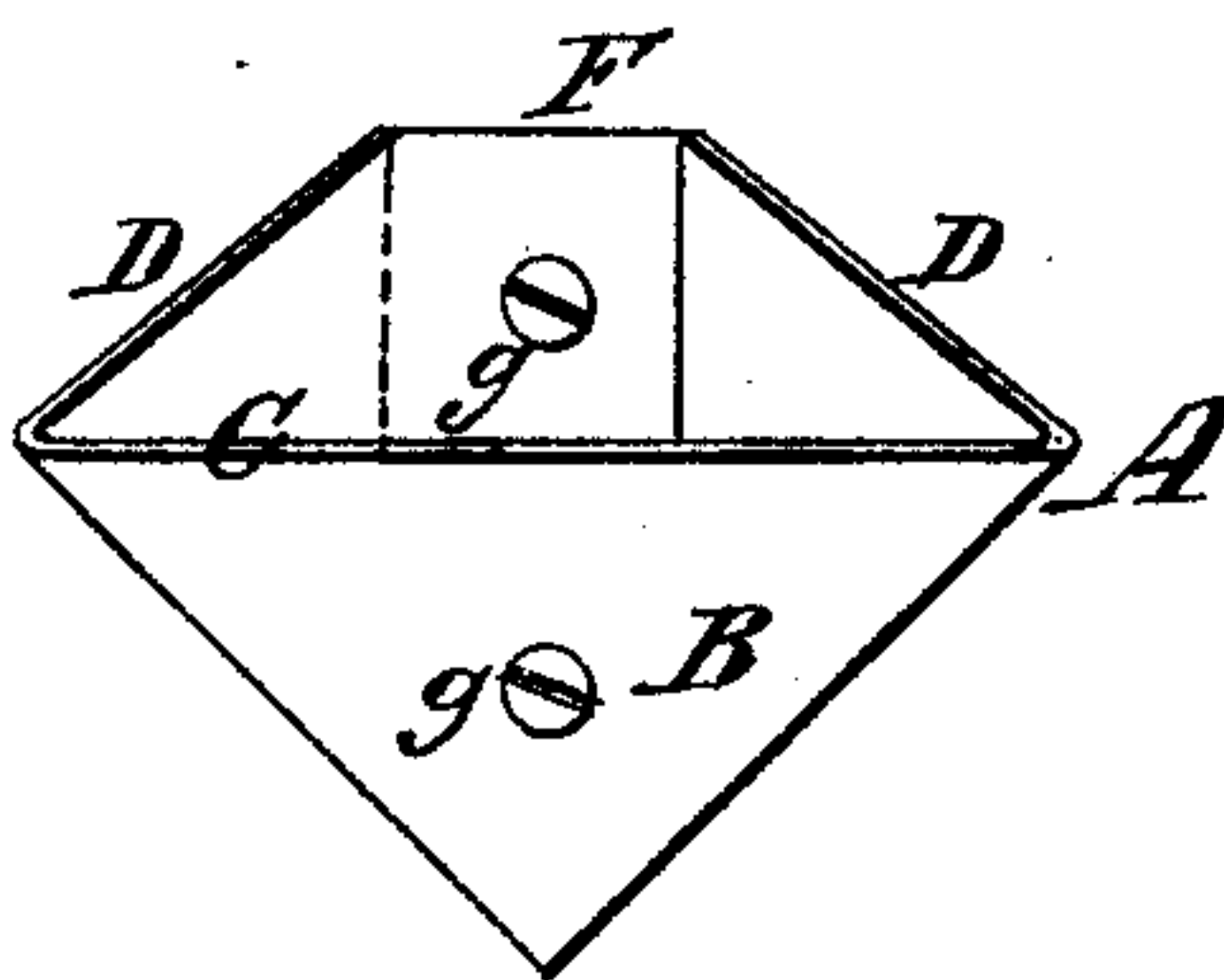
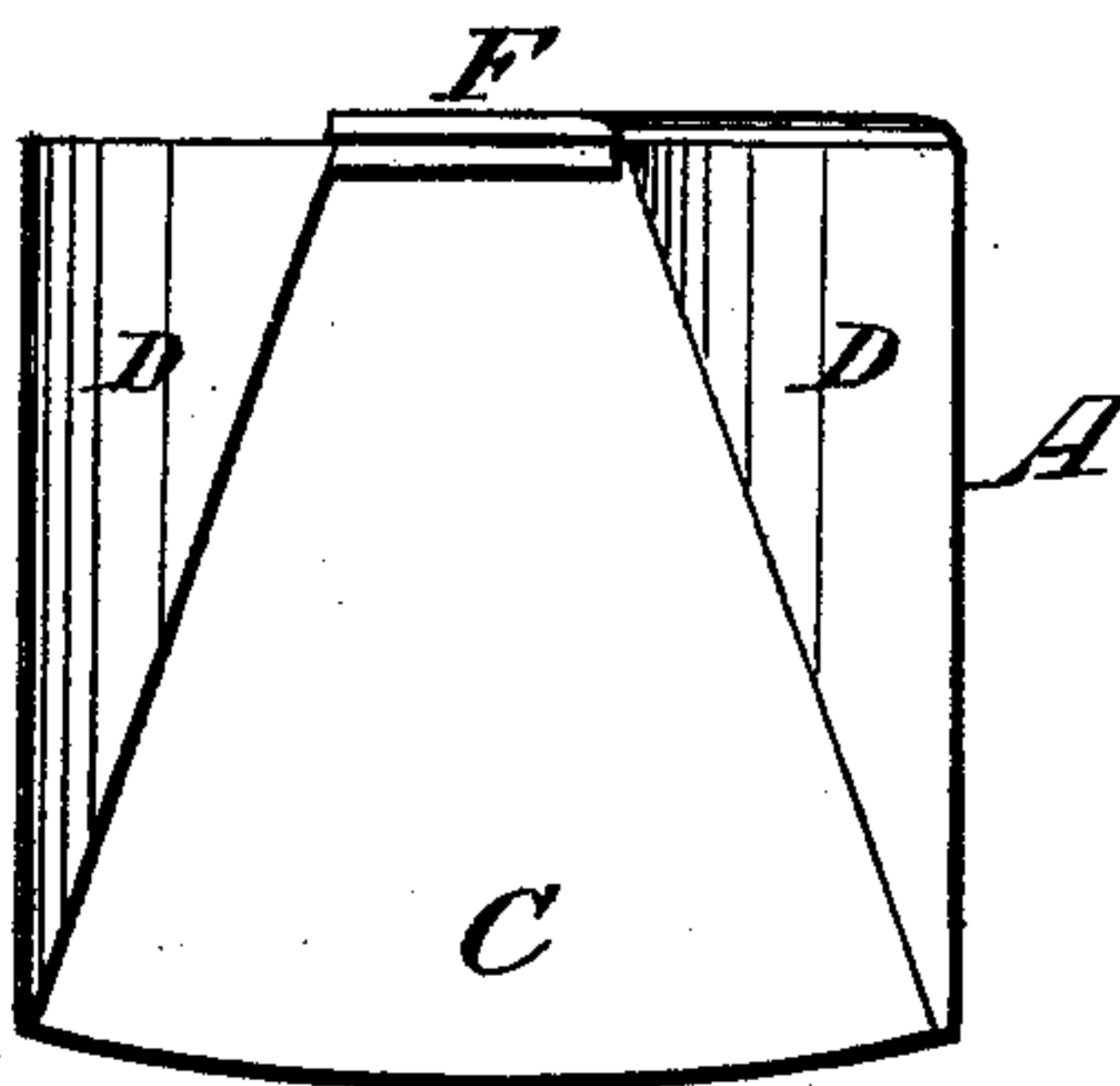


Fig. 2.



Witnesses

Abrahamson
Winchman.

Inventor
J. M. Lemon.

per *Munn & Co.*
Attys

United States Patent Office.

JOHN M. LEMON, OF POLK CITY, IOWA

Letters Patent No. 91,351, dated June 15, 1869.

IMPROVEMENT IN CONVEYER-"FLIGHT."

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN M. LEMON, of Polk City, in the county of Polk, and State of Iowa, have invented a new and useful Improvement in Conveyer-"Flight;" and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in machinery for moving or conveying flour or grain, in a horizontal distance, in mills and warehouses.

The usual conveyer is formed by attaching flat pieces of wood, called "flights," to a shaft which revolves within the conveyer-box, so that they form a spiral rib around the shaft. The ends of these pieces of wood run near the circular bottom of the box, so that when the shaft is revolved, the grain or flour is screwed along from one end to the other of the box, or until it is discharged therefrom.

These wooden "flights" have a tenon at the other end, which is inserted in a hole in the side of the shaft, one after the other, forming a spiral rib or imperfect screw-thread around the shaft, as before stated. Frequently the wood tenons shrink, and the "flights" become loosened, and occasion thereby much trouble and sometimes serious damage.

My invention consists in forming these "flights" of sheet-metal, as will be hereinafter more fully described.

In the accompanying plate of drawings—

Figure 1 represents an end view of the "flight," it being the end which is attached to the shaft.

Figure 2 is a view of the side, showing the length or projection of the "flight" from the shaft.

Similar letters of reference indicate corresponding parts.

A is the "flight."

It will be noticed that the "flight" is made from a single piece of sheet-metal, one end, B, being cut triangular in form, and turned at right angles with the blade C.

The sides of the blade C are turned or folded over, as seen at D D; the extreme ends of these sides E being also turned at right angles with C, and lapped over each other, as seen at F.

The parts B and F extend each way from the blade, and are fastened to the shaft by the screws *g g*, thus giving the "flight" a firm support upon each side.

The formation is such that it is very stiff and rigid when fastened to the shaft; much cheaper, and much less likely to get loose than the common wooden "flight."

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

The "flight" A, constructed as described, to be applied to a conveyer-shaft, for the purposes set forth.

JOHN M. LEMON.

Witnesses:

WILLIAM DOLPHIN,
J. B. KELLISON.