S. TAGGART.

Augers for Flour-Packer.

No. 166,906. Patented Aug. 17, 1875.

FIG I

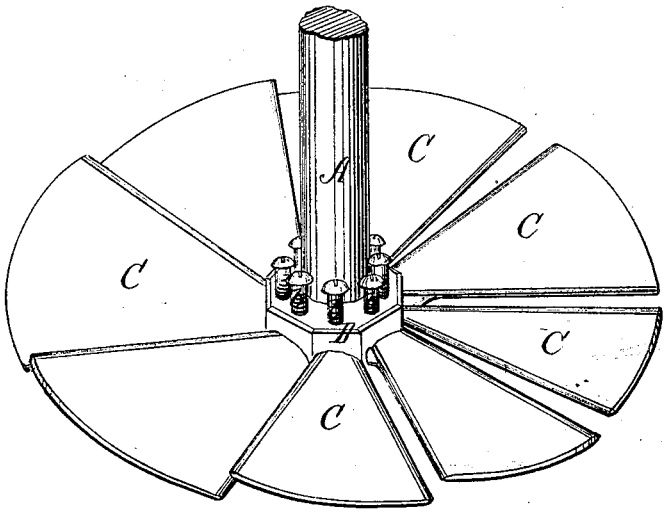


FIG II

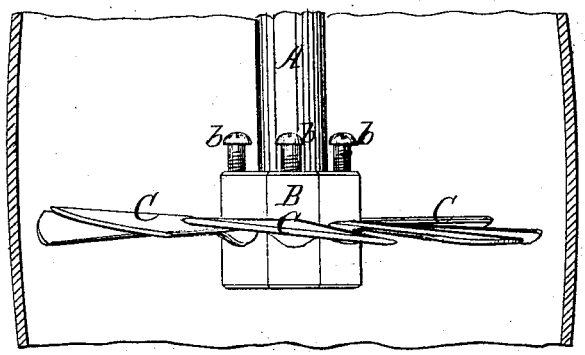
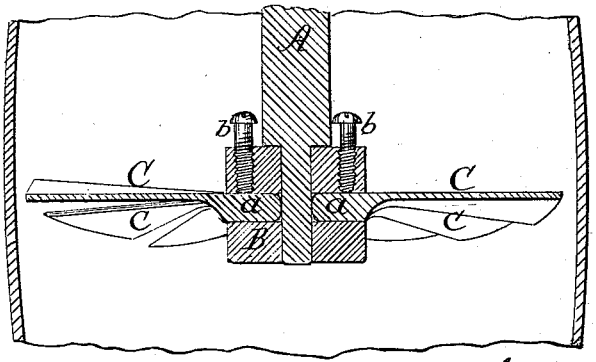


FIG III



WITNESSES

John C. Laing

J. H. Rutherford

INVENTOR

Samuel Taggart
by Johnson and Johnson
his Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL TAGGART, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN AUGERS FOR FLOUR-PACKERS.

Specification forming part of Letters Patent No. **166,906**, dated August 17, 1875; application filed June 8, 1875.

To all whom it may concern:

Be it known that I, SAMUEL TAGGART, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Auger for Flour-Packers; 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 which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The object of the present invention is to provide an auger for use in flour-packing machines, which is so constructed that it may be used for packing various kinds of flour, and also be capable of running to the right or left, or in reverse directions.

The invention consists in constructing a flour-packing auger of two or more independent wings or blades, which are loosely fitted into a hub on the auger-shaft so as to be capable of being set at a greater or less inclination, or at any desired angle in respect to the hub, this construction and adaptation of the blades enabling the auger to be used for packing various kinds of flour, the blades, for example, being set at a greater angle when used for packing wheat flour than when employed for packing flour of zinc, or other powdered substances of a greater specific gravity and density than wheat flour. The auger-blades, by reason of their adjustable attachment, can also be inclined or set at an angle to the right and left so as to run in reverse directions, which is a very desirable feature in flour-packing augers. The auger-blades are held in their adjusted positions by means of set-screws, or other suitable fastening devices.

In the accompanying drawings, Figure 1 represents a perspective view of an auger embracing my invention; Fig. 2, a side elevation, and Fig. 3 a vertical longitudinal section.

In the drawings, letter A denotes the shaft of a flour-packing auger, which is revolved by any suitable mechanism, and carries at its lower end a hub, B. Into said hub are set independent or sectional packing-blades C, two or more in number, which are made with round shanks *a*, entering into and capable of being turned in the hub.

The blades, which, in the present instance, are in the form of segments of a circular disk, are made flat or plane, but their surface may also be made spiral, in which case two sets of blades will be required—one right hand and one left hand.

The blades are capable of being set at any desired angle of inclination in respect to the hub of the auger-shaft, a greater angle or degree of inclination being required in an auger used for packing wheat, or similar flour, than in one employed for packing flour of zinc used in paint.

The blades, when set to the proper angle, either to the right or left, are held stationary or prevented from turning by means of set-screw *b* passing vertically down through the auger-hub, and bearing against the shanks of the blades. Other suitable fastening devices may, of course, be resorted to, if deemed preferable.

The auger-blades are so fitted into their hub, that they can be inclined in opposite directions, thus adapting a single auger to run in reverse directions.

The auger-blades, by reason of their sectional or independent construction, can be cheaply manufactured and easily applied to the hub, from which they can also be readily detached when broken.

Steel, which is susceptible of a high degree of polish, can also be used in the manufacture of the auger-blades, by making the same sectional.

A flour-packing-auger constructed according to my invention is most desirable in use and effective in operation, and it will be obvious that it possesses decided advantanges over the ordinary packing-augers having fixed blades, which cannot be adjusted to pack different materials, and which, when broken, cannot be replaced.

I claim—

1. A flour-packing auger, having sectional or independent blades, capable of being set

at any desired angle or degree of inclination, substantially as herein shown, for the purpose set forth.

2. The combination of the sectional adjustable blades C, having shanks *a*, with the hub B, shaft A, and fastening-screws *b*, as and for the purpose set forth.

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

SAML. TAGGART.

Witnesses:

WM. G. LOCKWOOD,

MOSES G. MCLAIN.