

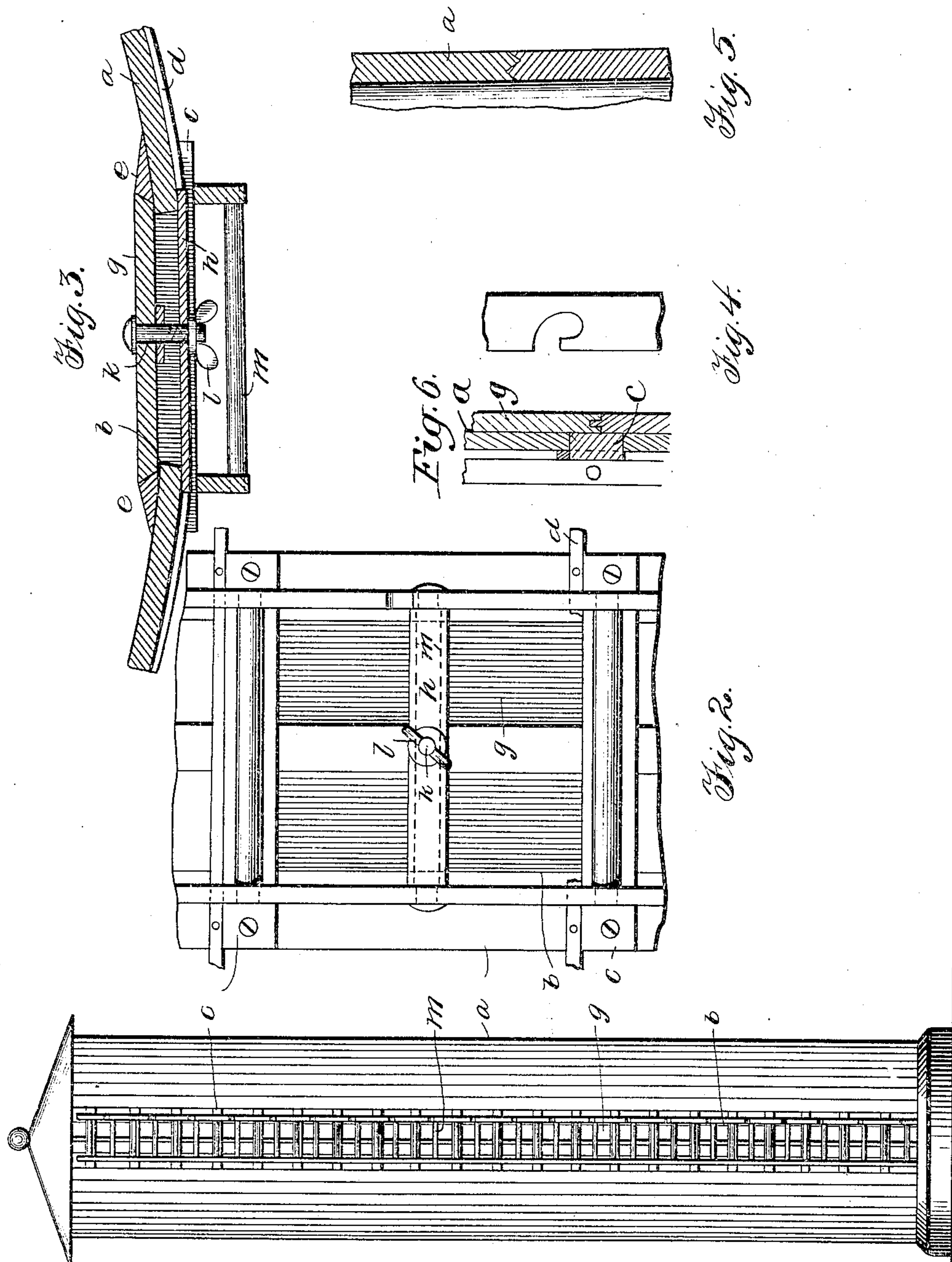
No. 766,038.

PATENTED JULY 26, 1904.

E. HILLARD.
SILO.

APPLICATION FILED APR. 1, 1903.

NO MODEL.



Witnesses
Frank G. Campbell.

A. Freundlich

Fig. 1.

Inventor
Elihu Hillard
by H. E. Hart
Attorney

UNITED STATES PATENT OFFICE.

ELIPHALET HILLARD, OF MERIDEN, CONNECTICUT, ASSIGNOR TO AMOS D. BRIDGE, OF HAZARDVILLE, CONNECTICUT.

SILO.

SPECIFICATION forming part of Letters Patent No. 766,038, dated July 26, 1904.

Application filed April 1, 1903. Serial No. 150,523. (No model.)

To all whom it may concern:

Be it known that I, ELIPHALET HILLARD, a citizen of the United States of America, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Silos, of which the following is a specification.

The object of this invention is to provide a silo having features of novelty and advantage.

Figure 1 is a general view of a silo with my invention attached thereto. Fig. 2 is an enlarged detail view. Fig. 3 is a cross-sectional view of a part of the silo. Fig. 4 is a side view of the ladder construction. Fig. 5 is a sectional view showing the construction of the body of the silo. Fig. 6 is a parti-sectional view showing the manner of joining the door-sections to one another.

The uses and requirements of structures of this kind are well known, and I will proceed to describe the novel features of my construction.

a denotes the body of the silo, and *b* denotes an opening in one side extending from top to bottom thereof, by means of which the silo may be filled and emptied. At intervals I provide braces *c*, which bridge the opening and have shoulders which set in between the edges of the opening. The customary bands *d* encircle the silo and are held in place by these bracing-strips.

Secured to the inner wall of the silo and extending from top to bottom thereof along the edges of the opening *b*, but set back slightly from the edges thereof, are jamb-strips *e*, which are beveled away from the opening. In order to close the opening, I provide a series of door-sections *g*. These door-sections *g* are slightly wider than the opening *b*, so that they will lie against the inner wall of the silo, and their edges are beveled to correspond to the bevel of the jamb-strips. On their front faces the sections are provided with a locking-bar *h*, which is mounted in any suitable manner, as on a pin *k*, and held in place by the thumb-screw *l*. These door-sections are preferably formed of matched parts, and each section preferably matches into each other section.

Preferably, also, the door-sections join one another behind the braces *c*. Thus a practically air-tight closure for the opening in the silo is insured.

A ladder-front is provided for the silo and is positioned over the opening *b*, being secured to the body of the structure. I prefer to proportion and arrange the parts so that every other round *m* of the ladder lies directly over the locking-bar *h* on the door-section, and in order to permit of easy access to this bar I arrange that these rounds shall be removable.

The parts of a structure of this kind are subjected to considerable swelling and warping and are very apt to become jammed so that the removable parts cannot be used; but constructions which are affected in this way have been considered necessary in order to insure that the structure shall be air-tight.

My invention simplifies the construction of silos in all ways and is not open to the objections of most of the silos now in use.

Another feature of my invention resides in the manner in which I join the ends of the staves making up the body of the structure, which is to so shape the ends that they will interlock to form a broken-line joint which insures their proper position with respect to one another and produces a joint which is to all intents and purposes air-tight.

I do not wish to be understood as limiting myself to the exact structure herein described except to the extent made necessary by the state of the art.

I claim as my invention—

1. The combination with a silo having a continuous opening in the wall thereof, of jamb-strips arranged near to but not at the edges of said opening, of removable door-sections adapted to rest against said jamb-strips and against the inner wall of the silo, substantially as described.

2. The combination, in a silo having an opening through the wall thereof, with the beveled jamb-strips secured to the inner wall of the silo and arranged near the edge of said opening, of removable door-sections adapted to rest against the inner wall of the silo and

have their edges beveled to correspond with the beveling of the jamb-strips, substantially as described and for the purposes set forth.

3. In combination in a silo having a continuous opening, removable door-sections for said opening, and means for securing said door-sections in place, and a ladder-front for said opening, the rounds of said ladder overlying said securing means being removable, substantially as described and for the purposes set forth.

4. In combination, with the silo having a

continuous opening through the wall thereof, braces for the opening, said braces forming supporting means for the hoops, and removable door-sections, each said door-section interlocking with another door-section behind said braces, substantially as described. 15

In testimony whereof I affix my signature in presence of two witnesses.

ELIPHALET HILLARD.

Witnesses:

H. STEPHEN BRIDGE,
D. I. KREIMENDAHL.