

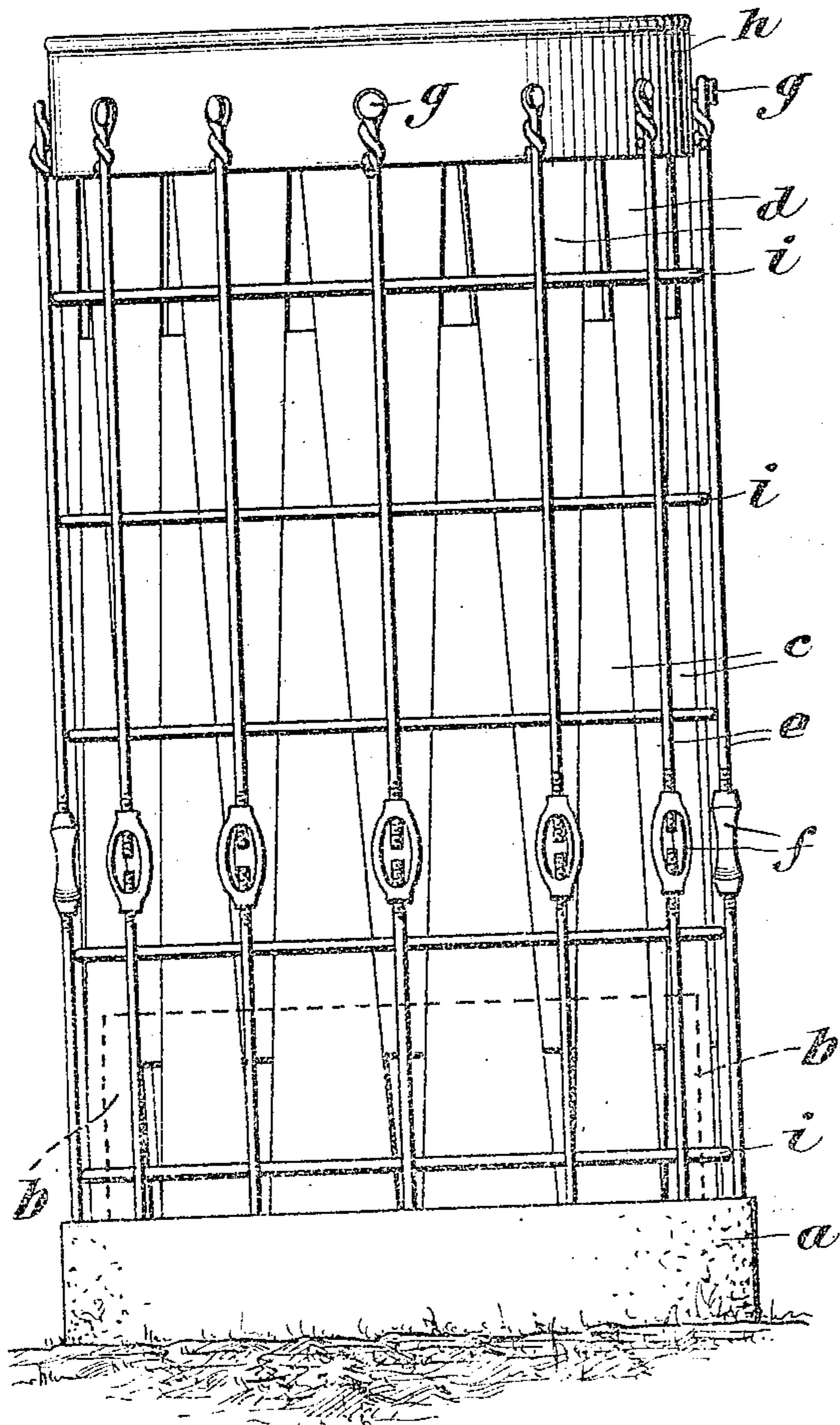
C. E. HEDRICK.

SILLO.

APPLICATION FILED MAR. 5, 1915.

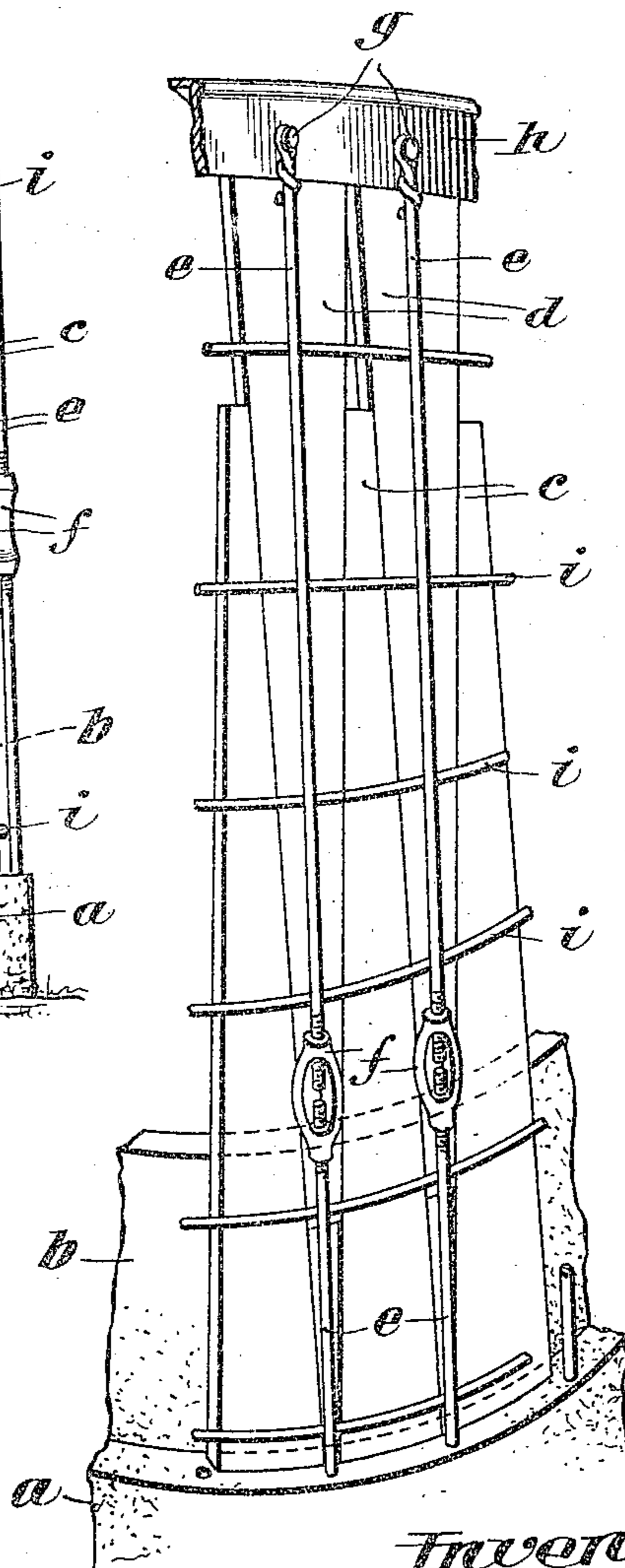
Patented Jan. 4, 1916.

1,166,987.



*Fig. 1.*

*Fig. 2.*



*Witnesses:*  
Bertha J. Hedrick.  
J. B. Griffith

*Inventor:*  
Clarence D. Smith (by)

# UNITED STATES PATENT OFFICE.

CLARENCE ELLIOTT HEDRICK, OF NEWTON, KANSAS.

## SILLO.

1,166,987.

Specification of Letters Patent.

Patented Jan. 4, 1916.

Application filed March 5, 1915. Serial No. 12,464.

*To all whom it may concern:*

Be it known that I, CLARENCE ELLIOTT HEDRICK, a citizen of the United States, residing at Newton, in the county of Harvey and the State of Kansas, have invented a new and useful Silo, of which the following is a specification.

My invention relates to improvements in wood stave silos in which I use wedge-shaped staves by the use of which I eliminate the tedious method of making adjustments on the sustaining hoops as is necessary on the common makes of wood stave silos. I attain these objects by the structure shown in the accompanying drawing.

Figure 1 is an elevation of the structure. Fig. 2 is a vertical view of a portion of a wall.

Similar letters refer to similar parts throughout.

In the accompanying drawing, Fig. 1, *a*, is a concrete foundation extending into the ground.

*b*, is a part of the foundation extending upward on the inside of the silo wall. *c*, wedge-shaped staves resting upon the foundation. *d*, wedge-shaped staves that are suspended between wedge-shaped staves *c*.

*e*, are anchor cables with which the suspended staves *d* are forced downward between *c*.

*f*, are turn-buckles.

*g*, are bolts holding collar *h* to staves and also points of attachment for cables *e*.

*h*, is a sustaining collar that passes around the entire circumference of the silo.

*i*, represents the hoops that sustain the silo wall.

I accomplish this end by using wedge-shaped staves in constructing the walls of the silo, the staves being arranged so that one half of them stand in a vertical position with their butts resting on the concrete

foundation and the other one half of the staves are placed in a vertical position, suspended between the staves, whose butts rest on the concrete foundation, so that the butts of the suspended staves extend some distance above the upper ends of the staves that stand on said foundation, all staves being of equal length.

The butts of the staves that extend above are held in position by the use of a rigid, wood or metal, collar or band *h* that extends around the circumference of the silo. This collar or band is anchored, by means of steel cables or rods, that are equipped with turn-buckles, to bolts, that are set in the concrete foundation, thus making provisions for taking care of the shrinkage in the lumber, comprising the silo wall, by forcing the upper wedge-shaped staves downward, between the lower wedge-shaped staves, whose butts rest on the concrete foundation, in a wedging manner, thereby making the silo wall tight within the surrounding hoops and thereby eliminating the necessity of taking up the slack in said hoops, as is commonly done, by the use of lugs and nuts.

I claim:

A silo having wedge shaped staves and a concrete foundation, a number of said staves standing vertically with their butts resting on the concrete foundation, the remainder of the staves being supported between the first named staves so that the butts of the second named staves extend some distance above the upper points of the first named staves, and means for drawing the staves together in a longitudinal direction whereby the longitudinal joints are tightened.

CLARENCE ELLIOTT HEDRICK.

Witnesses:

STELLA ANDERSON,  
BERTHA J. HEDRICK.