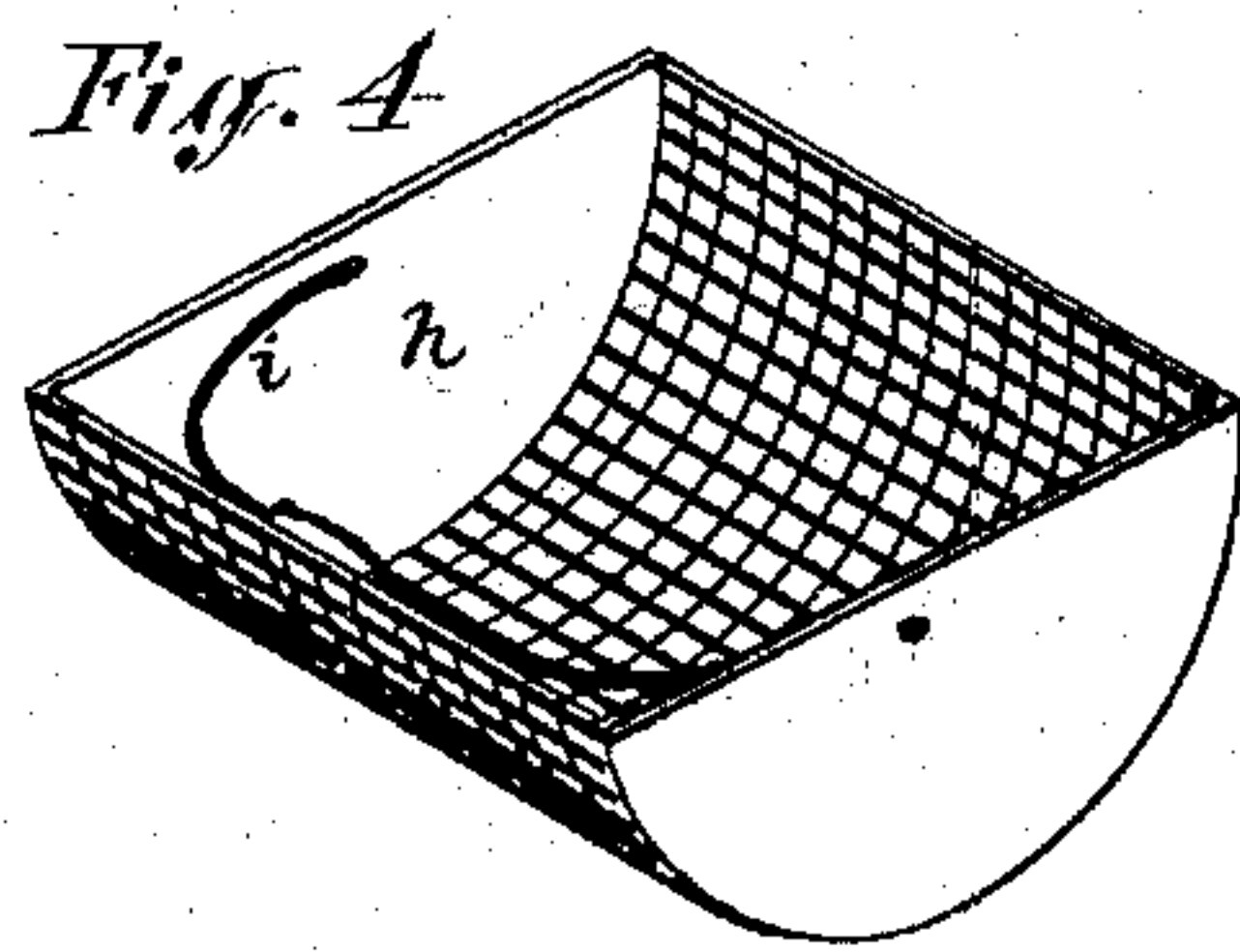
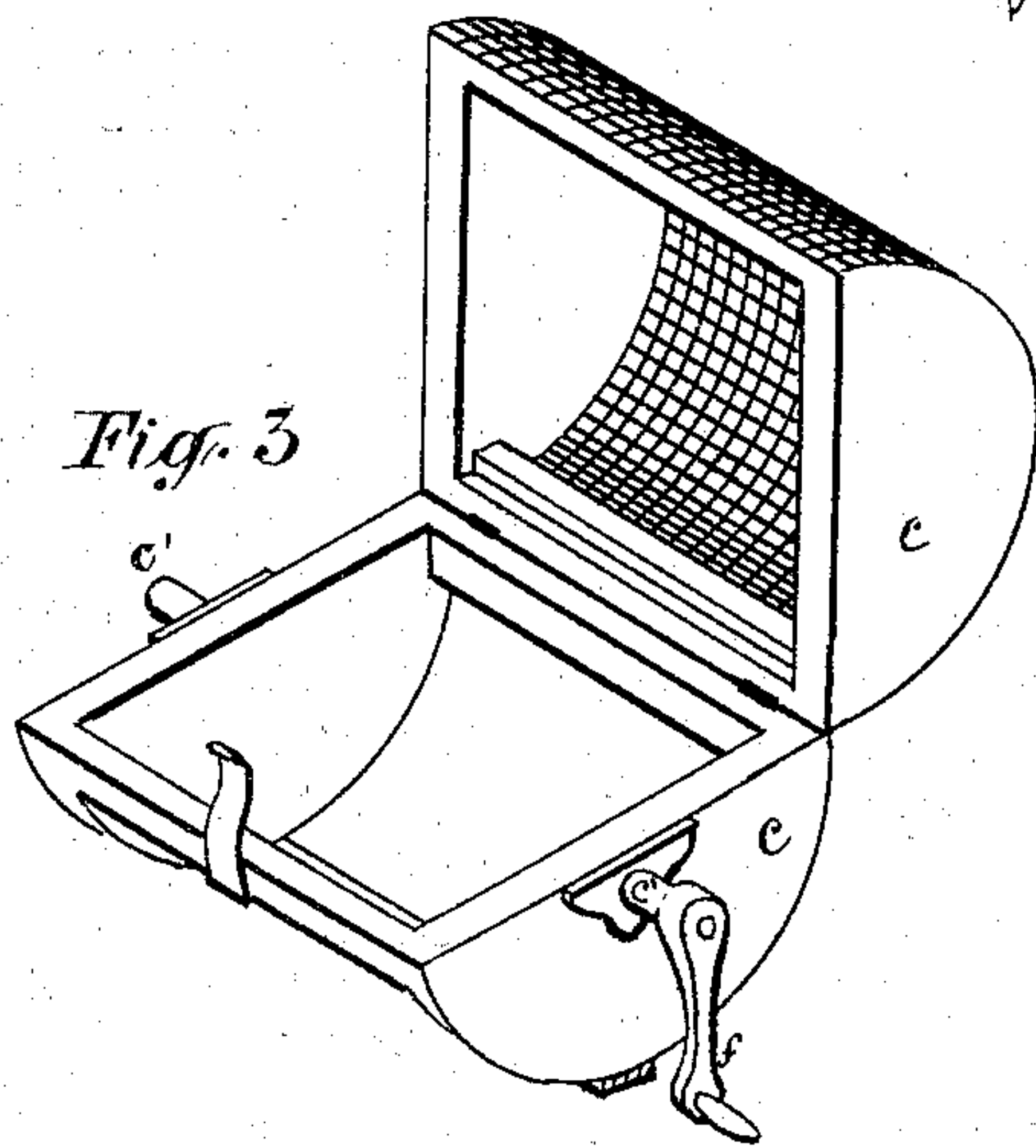
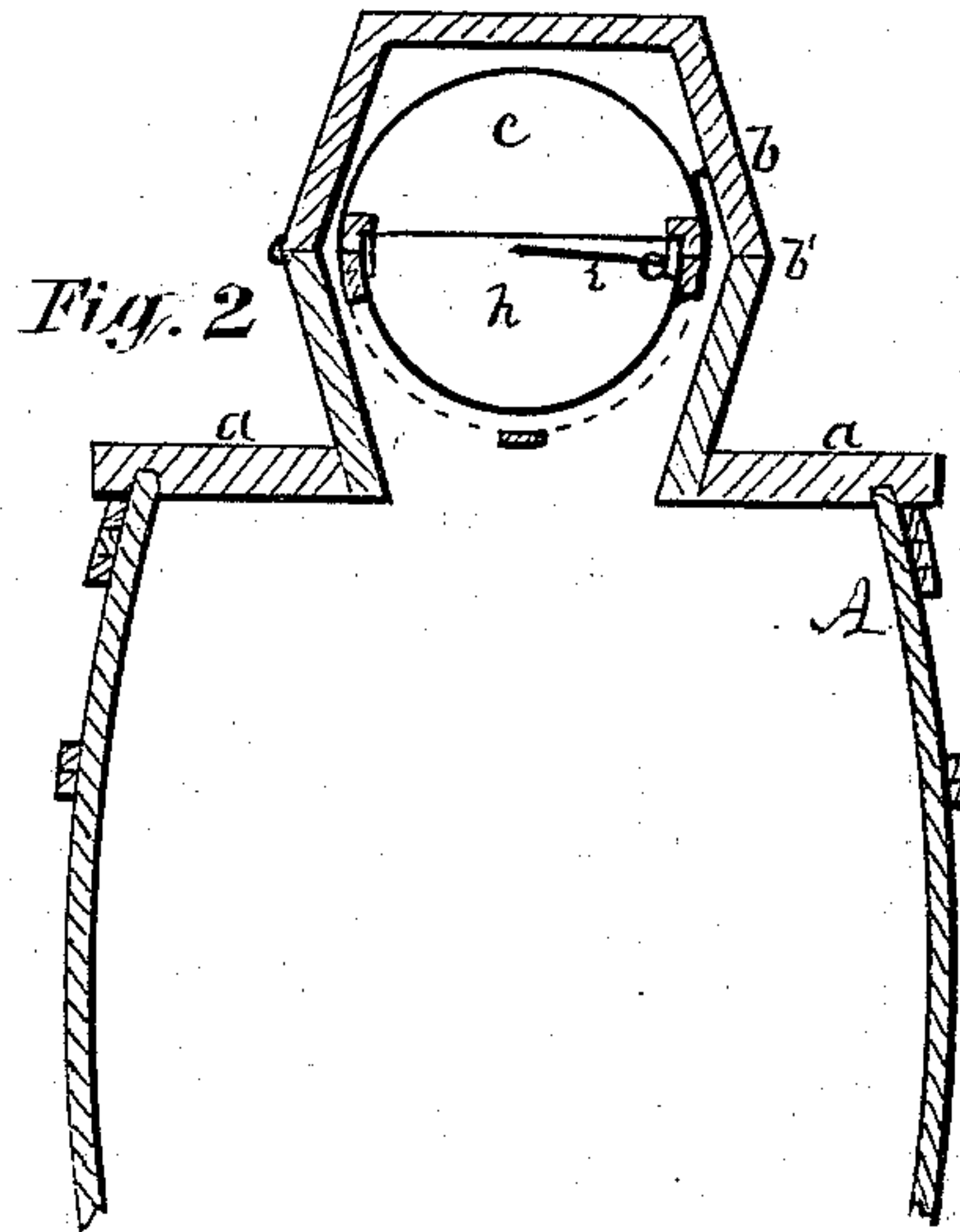
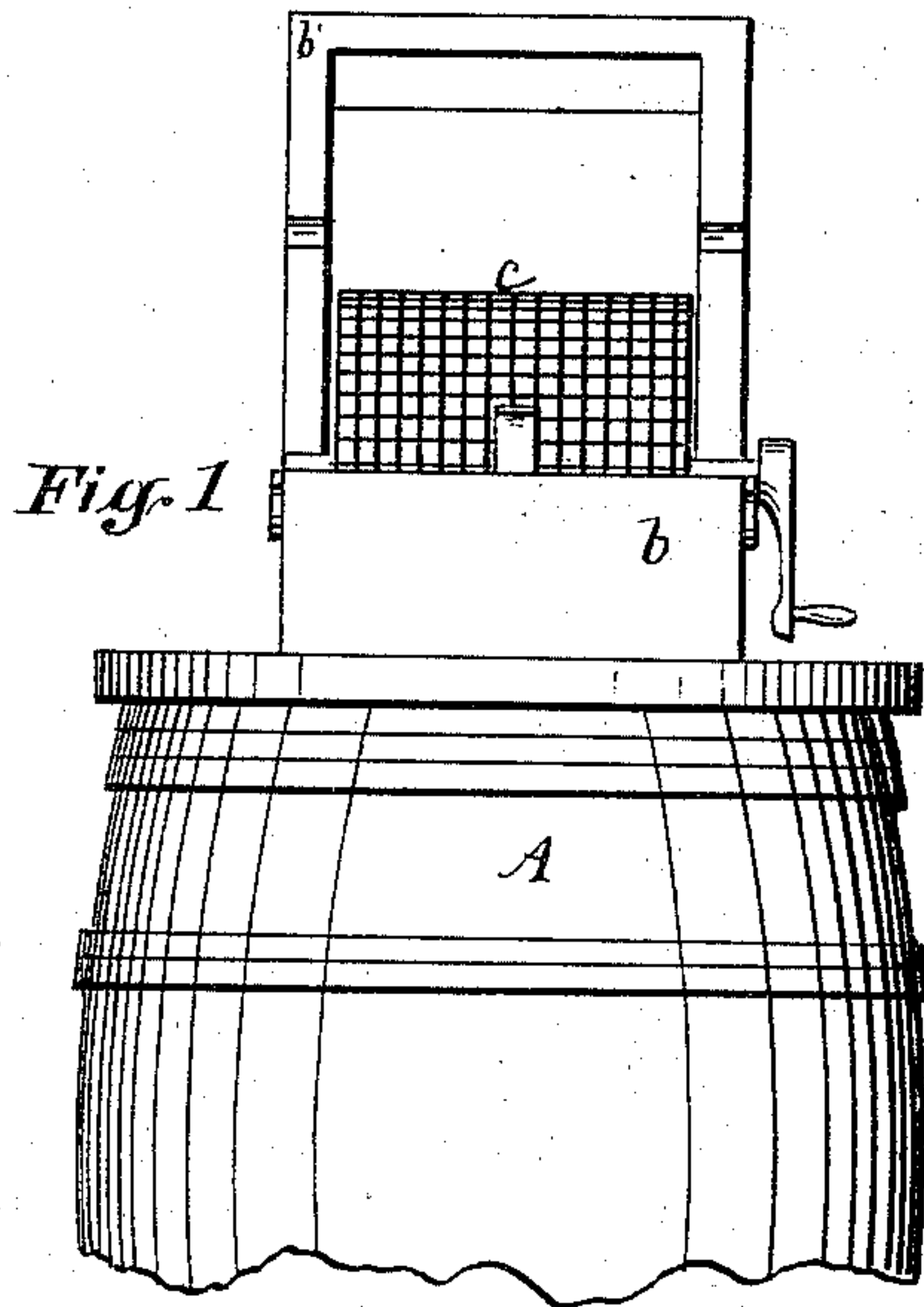


C. F. SAUL.  
Coal-Sifters.

No. 157,698.

Patented Dec. 15, 1874.



Witnesses:  
*J. J. Brunough*  
*Chas. E. Eds.*

Inventor:  
*Charles F. Saul.*

# UNITED STATES PATENT OFFICE.

CHARLES F. SAUL, OF SYRACUSE, NEW YORK.

## IMPROVEMENT IN COAL-SIFTERS.

Specification forming part of Letters Patent No. **157,698**, dated December 15, 1874; application filed October 23, 1874.

*To all whom it may concern:*

Be it known that I, CHARLES F. SAUL, of Syracuse, New York, have invented an Improvement in Coal-Sifters, of which the following is a specification:

My invention relates to the cheap and convenient construction of a coal-sifter applicable to domestic and other purposes, which will separate the ashes from the coal effectually and quickly without scattering dust about the place in which the sifting is done.

The construction is as follows, referring to the accompanying drawing, in which—

Figure 1 is a general view of the sifter with top open. Fig. 2 is a vertical section of the same; Fig. 3, the cylinder detached; Fig. 4, the coal-basket detached.

I intend to place my sifter for use upon a barrel or other vessel, A, to receive the ashes. The sifter is composed of a case, *b*, of hexagonal or other convenient form, with a base, *a*, which serves as a cover of the receiver A, with an opening into the case *b* to discharge the ashes through. The case *b* opens at *b'*, its upper half being hinged to the lower. Within this case a horizontal cylinder, *c*, is put, having journals *c'* that rest on bearings in the ends of the case, and on one of the journals there is a crank, *f*, by which the cylinder is revolved. The cylinder *c* opens in the plane of its axis, as seen in Fig. 3, its upper half or

cover being covered with wire-cloth, and the sides of the lower part, united by cross-pieces, contain the coal-basket *h*, shown detached in Fig. 4, of semi-cylindrical form, clothed on its curved side with wire-cloth, and having a bail or handle, *i*, by which it can be removed or replaced, which falls inside the basket in the cylinder.

To operate this screen the coals, &c., to be sifted are put into the basket *h*, which is placed in the cylinder *c*, the cover of said cylinder is then closed and fastened, and the top of the case shut down, and the cylinder revolved by its crank, which discharges the ashes from the cylinder into the receptacle A below; the case and cylinder are then opened and the basket of coal removed and emptied, which completes the operation.

Having thus fully described my coal-sifter improvements, I claim—

1. The revolving cylinder-screen *c* and basket *h*, combined, constructed, and arranged substantially as and for the purposes specified.

2. The combination of the revolving screen, composed of the cylinder *c* and basket *h*, with the case *b*, constructed, arranged, and employed as above described.

CHARLES F. SAUL.

Witnesses:

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