

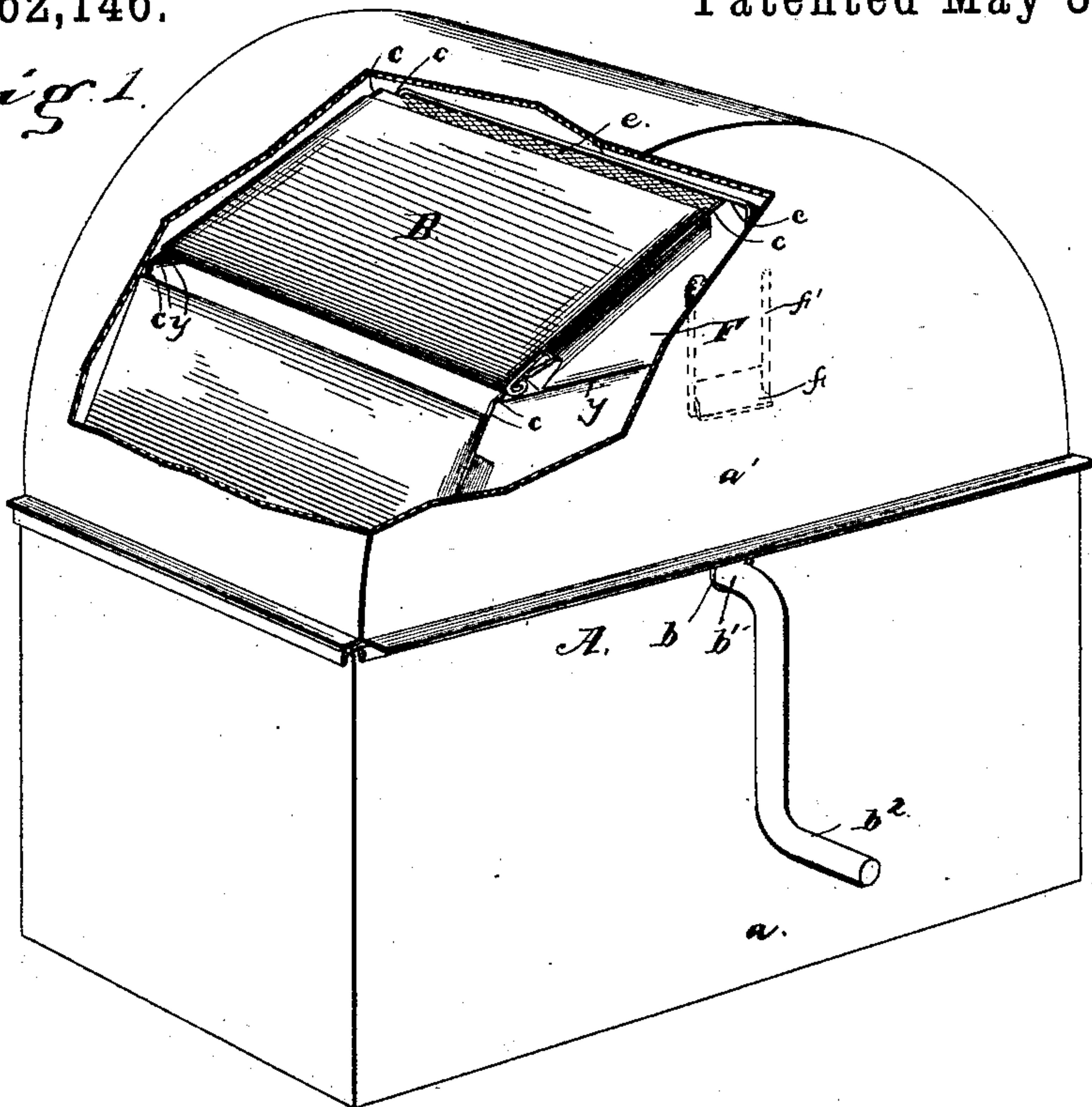
(No Model.)

H. W. CONKLING & W. M. FISHER.  
STEAM WASHING MACHINE.

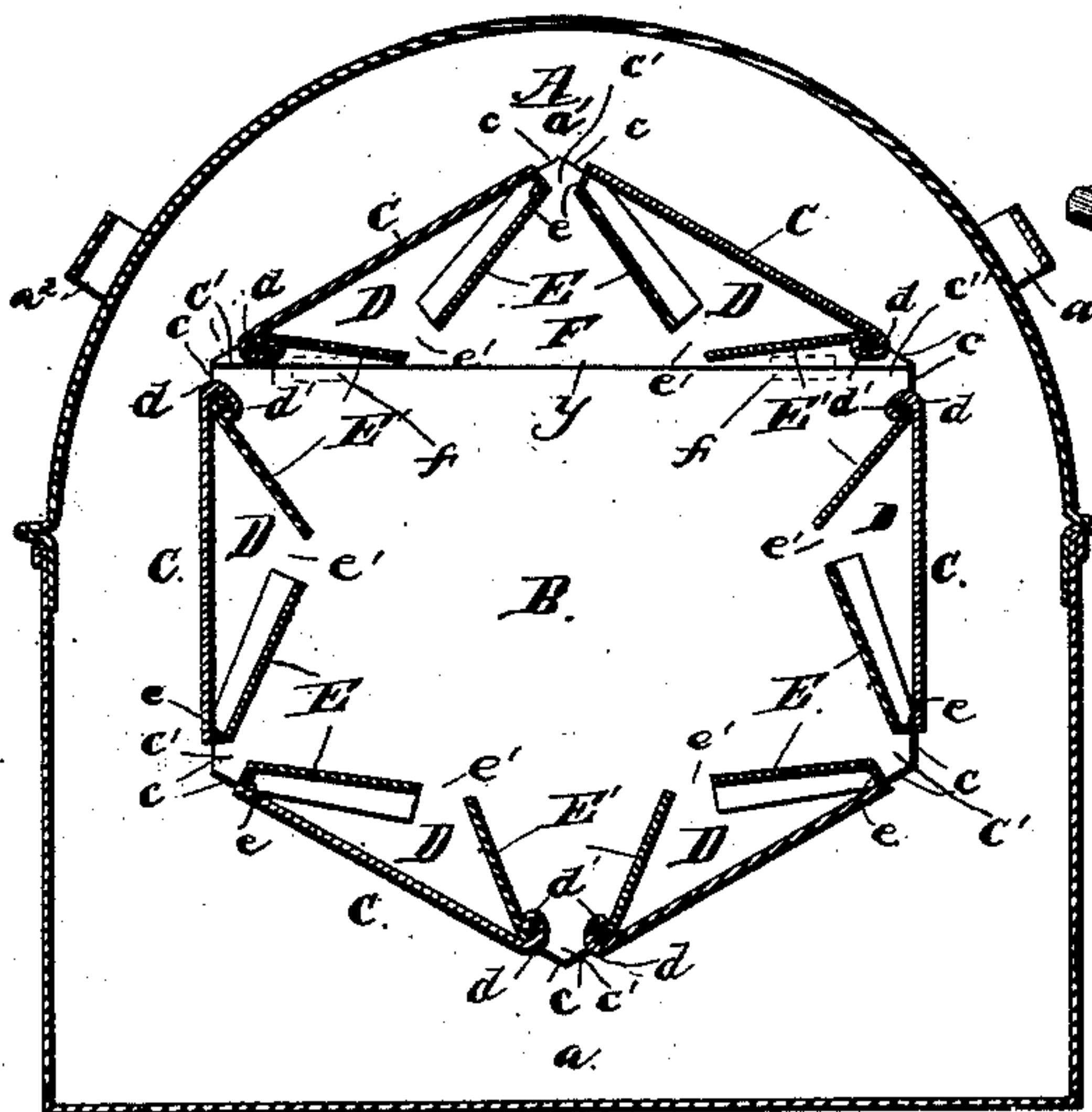
No. 362,146.

Patented May 3, 1887.

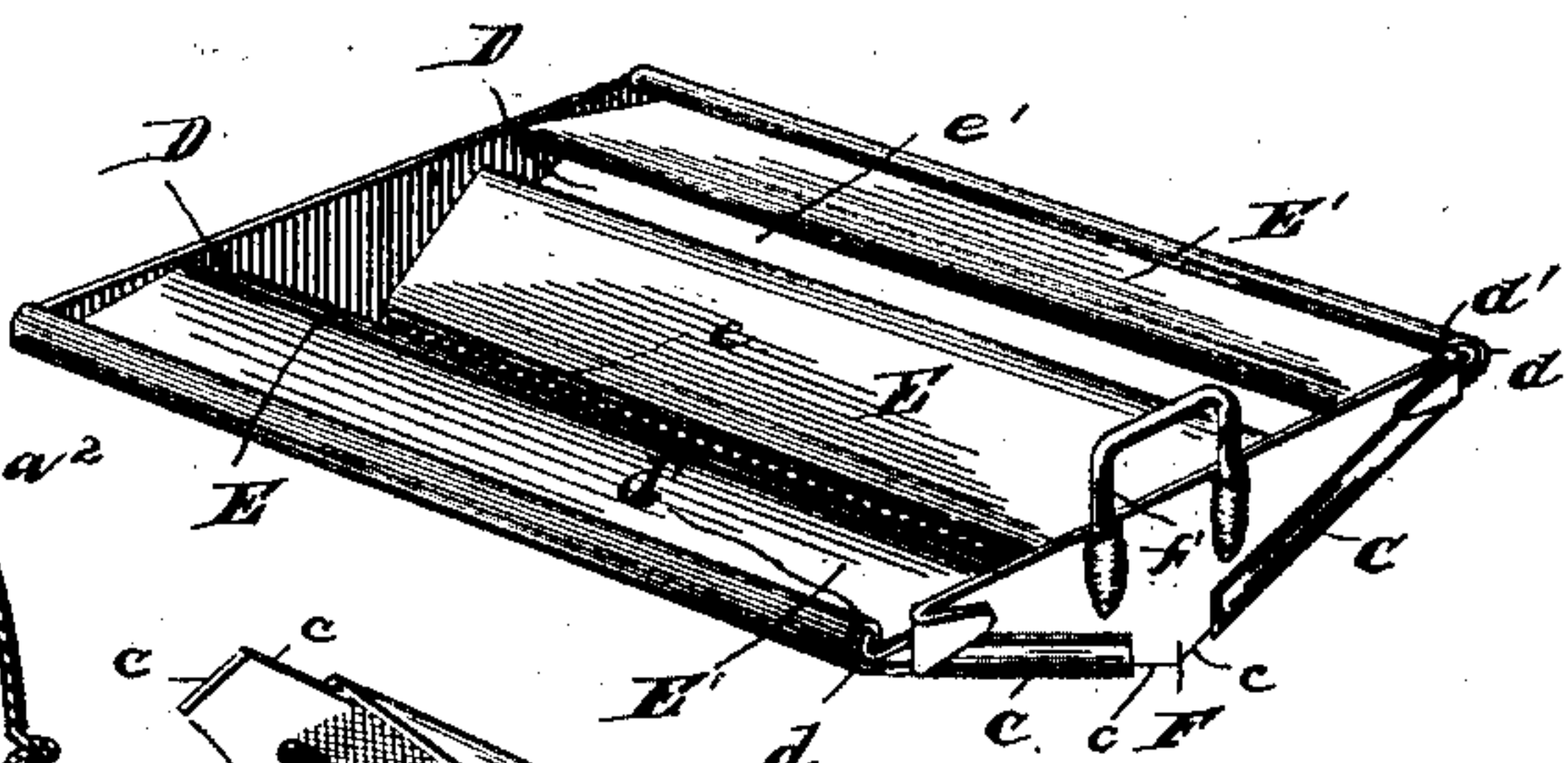
*Fig. 1.*



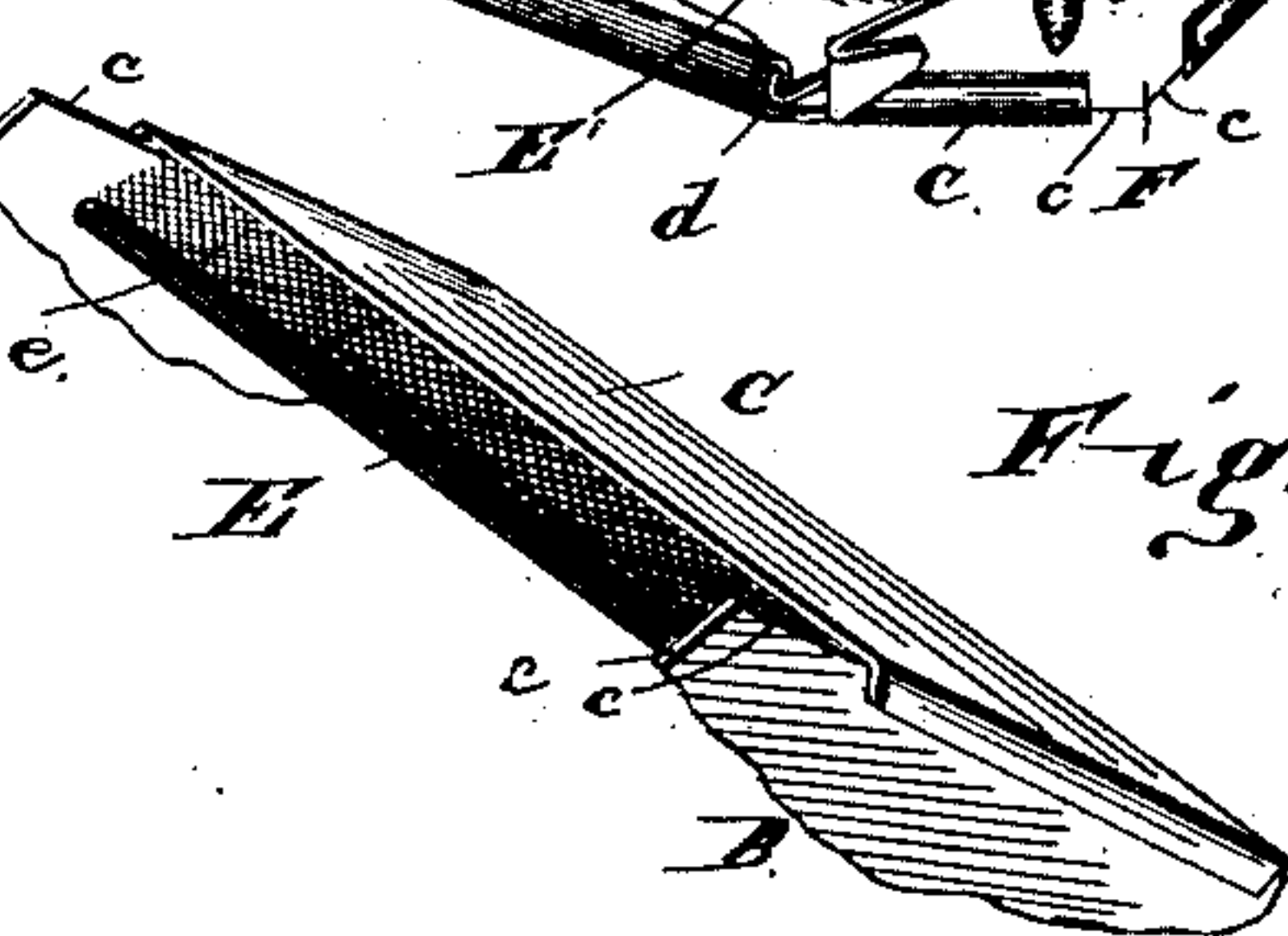
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

HENRY W. CONKLING AND WILLIAM M. FISHER, OF IOLA, KANSAS.

## STEAM WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 362,146, dated May 3, 1887.

Application filed March 8, 1887. Serial No. 230,126. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY W. CONKLING and WILLIAM M. FISHER, citizens of the United States, residing at Iola, in the county of Allen and State of Kansas, have invented a new and useful Improvement in Steam Washing-Machines, of which the following is a specification.

Our invention relates to improvements in washing-machines; and its objects are to strain the water entering the buckets of the device; to force steam through the clothes within the cylinder; to pour boiling water from the top of the rotating cylinder in order to rinse the clothes therein, and to permit the cylinder to be rotated in either direction with an equally-effective result. These objects we accomplish by the construction and arrangement of the buckets and the combination of the latter with the rotating cylinder, as hereinafter described, illustrated in the drawings, and pointed out in the claims hereto appended.

In the accompanying drawings, Figure 1 represents a perspective view of the machine, the cover or top being partly broken away to show the cylinder within. Fig. 2 represents a central longitudinal vertical section of the same. Fig. 3 represents a perspective view of several of the buckets attached to a portion of one side of the cylinder. Fig. 4 is a detail view of one of the buckets to show the strainer or screen.

Referring to the drawings by letter, A designates the casing of the machine, of which the lower rectangular part, *a*, forms the boiler, and the upper semi-cylindrical part, *a'*, the cap or cover, which fits closely on the boiler and is provided with a handle or bail, *a''*, on each side for convenient removal.

B is the cylinder, having secured centrally to its end plates, *b*, the journals *b'* *b'*, which turn in bearings made centrally in the upper side edges of the boiler-shell, and one of which is extended and formed into a crank-handle, *b''*, for the purpose of rotating the cylinder. The end plates of the cylinder are regular polygons, each similar and having an even number of edges, *c* *c*, as six or eight.

C C are transverse plates uniting the edges *c* of the opposite end plates and having between them the spaces *c'* *c'*, as shown. Each

plate C forms the outer side of a bucket, D, two plates, E and E', forming the inner side thereof. The plate C near one edge is bent inward, as at *d*, and the edge is bent on itself in hook form, as at *d'*. The edge of the plate E' is also bent into hook form and engaged with the hooked edge of the plate C, the said edges being forced together so as to be water and air tight. From the joint the plate E' inclines inward under the plate C. The plate E inclines opposite to the plate E' from below the opposite edge of the plate C, to which its adjacent edge is connected by the sieve or strainer *e*. Between the inner edges of the plates E E' of each bucket is a longitudinal opening, *e'*, for the escape of water therefrom. The buckets D are reversed alternately, the closed end of the adjoining ones pointing in opposite directions.

F is a part of the cylinder, made into a gate and hinged at *f* upon one side, and *f'* is a locking-loop secured to the other side of the gate, which loop passes over the lug *f''* standing from side of the cylinder. The gate F is made of portions of the side plates, which are cut on the lines *y*, and a portion of the circumferential surface of the cylinder having two buckets attached.

To operate the machine the clothes are put in the cylinder and the latter closed, the cylinder set in its bearings, and sufficient water poured in the boiler to cover the floor of the lowest bucket about one inch, and the cylinder rotated. As the buckets descend into the water the clothes will face against and close the openings *e'* of the buckets. The water flows in only through the sieves or strainers *e*, so that it is strained thereby, and as the buckets which have their sieves downward when they enter the water will have their closed ends downward upon leaving the same they will, upon reaching the top of the machine, empty their contained water upon the clothes below and rinse the same. The air inclosed in the buckets as they enter the water will be pressed upon by the latter and will force steam up through the clothes over the openings *e'*. As the buckets are alternately reversed, the motion of the cylinder may be reversed without preventing the operation thereof.



Having thus described our invention, we claim—

1. In a washing-machine, the combination, with the closed casing having its lower part formed into a boiler, of the cylinder rotating in said casing and provided with openings in its circumference, and the buckets formed on the inner circumference of said casing and each having a closed end and an end covered with a sieve or strainer, substantially as described.

2. In a washing-machine, the combination, with the closed casing having its lower part formed into a boiler, of the cylinder rotating in said casing and having openings in its circumferential surface, and the even number of buckets alternately reversed in position and each having a closed end and an end covered by a sieve or strainer, substantially as specified.

3. In a washing-machine, the combination, with the closed casing having its lower part

formed into a boiler, of the cylinder rotating therein and composed of the polygonal end plates, B, and the plates C, connecting the opposite edges thereof and having the openings  $e'$  between them, the buckets D, formed by the plates C and the inclined plates E E', the former of which have their outer edges forming closed unions with the adjacent edges of the plates C, and the inclined plates having the openings  $e'$  between their inner edges, and the strainers  $e$ , covering the space between the adjacent edges of the plates C and E', substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

HENRY W. CONKLING.  
WILLIAM M. FISHER.

Witnesses:

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J. R. CRIGLER.