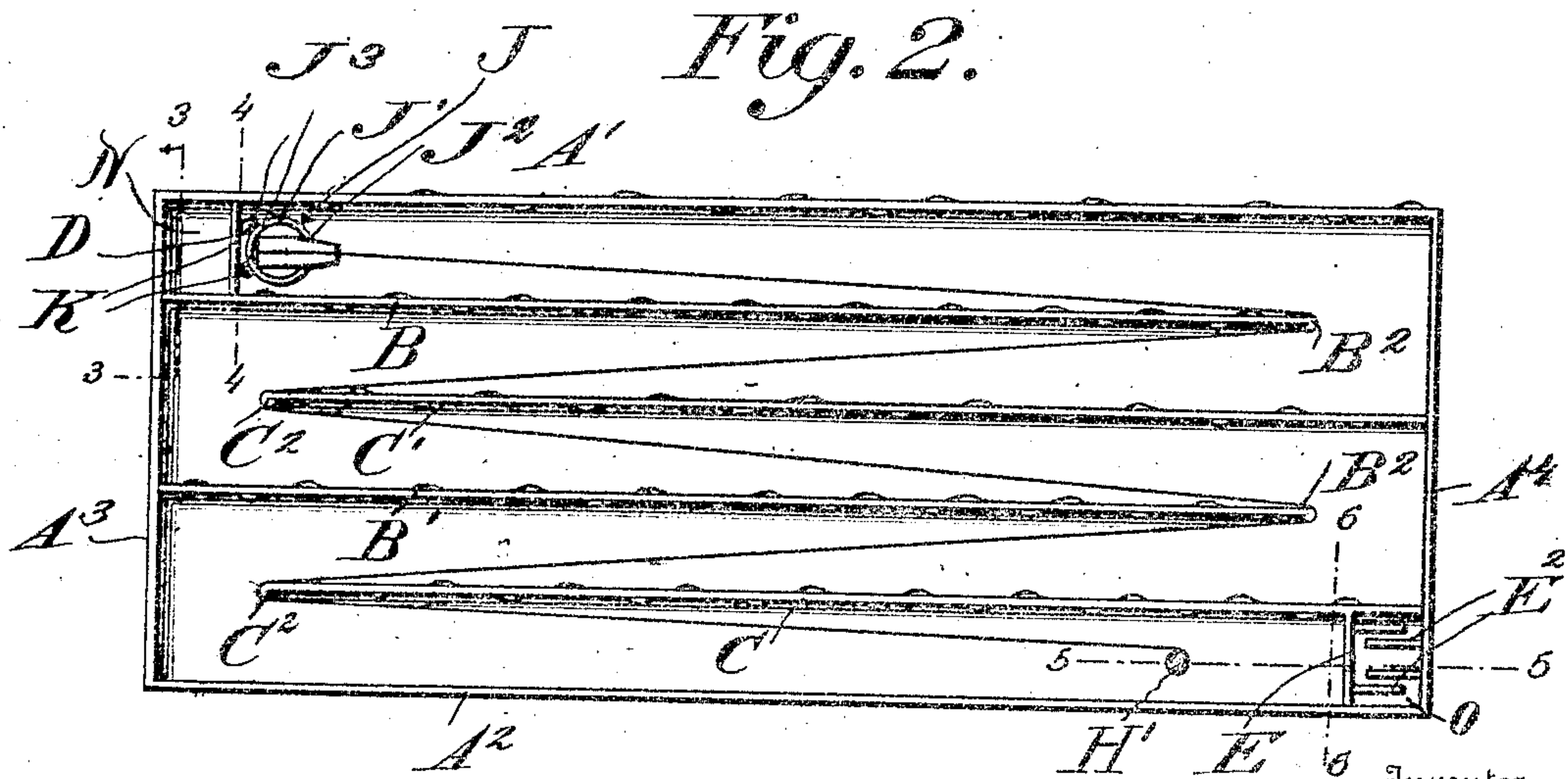
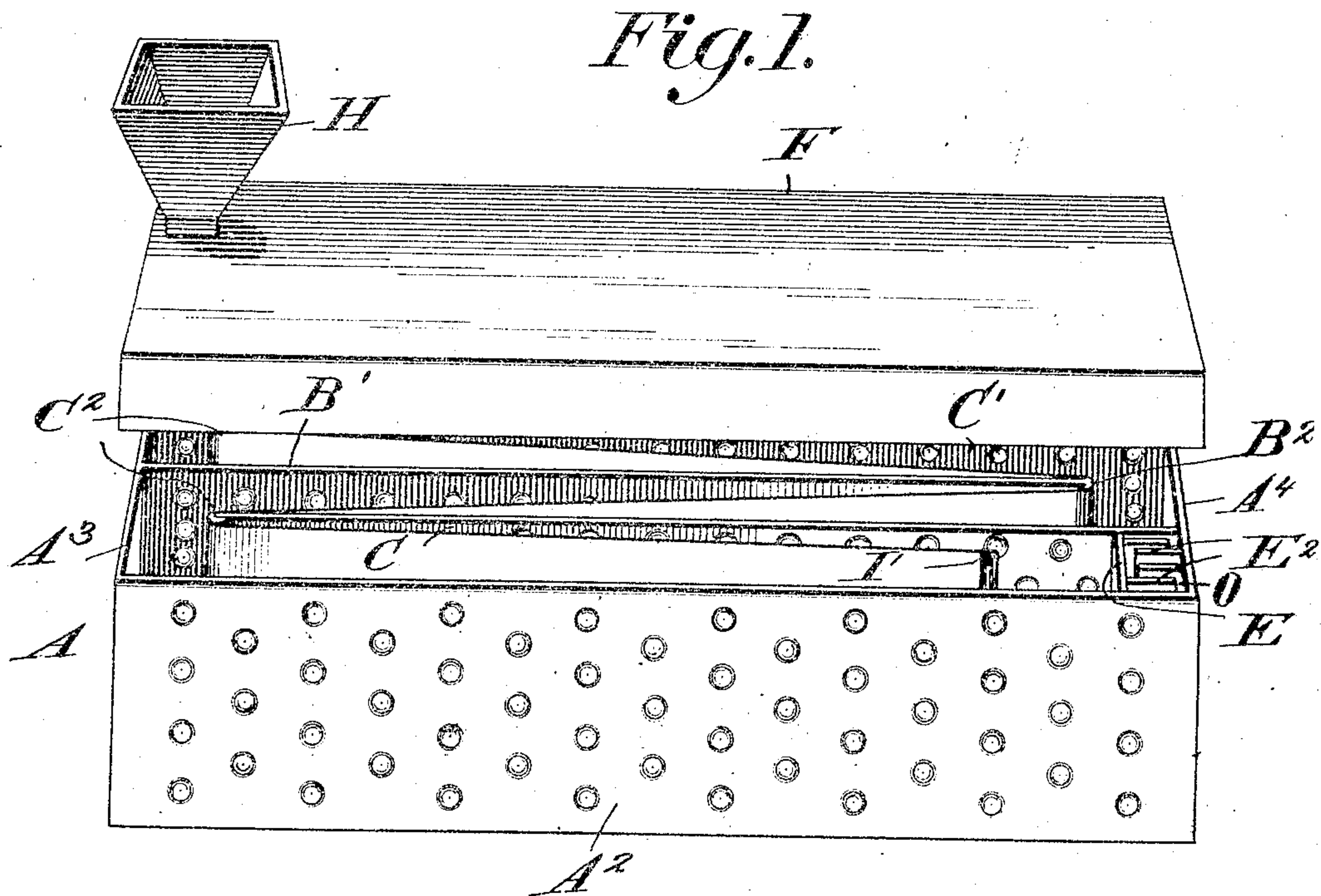


907,942.

Patented Dec. 29, 1908.

2 SHEETS—SHEET 1.



Inventor
William F. Zierath

Witnesses

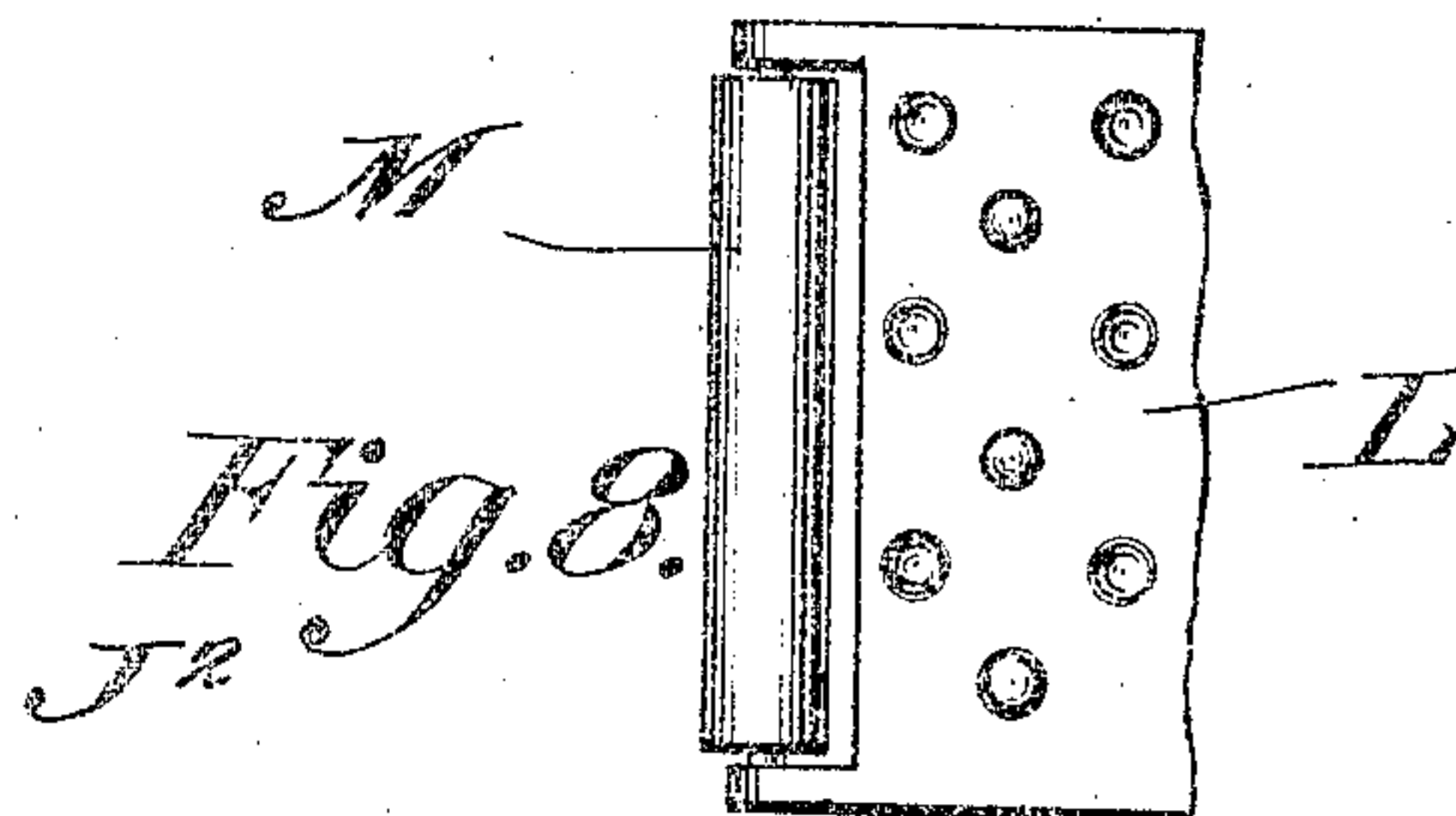
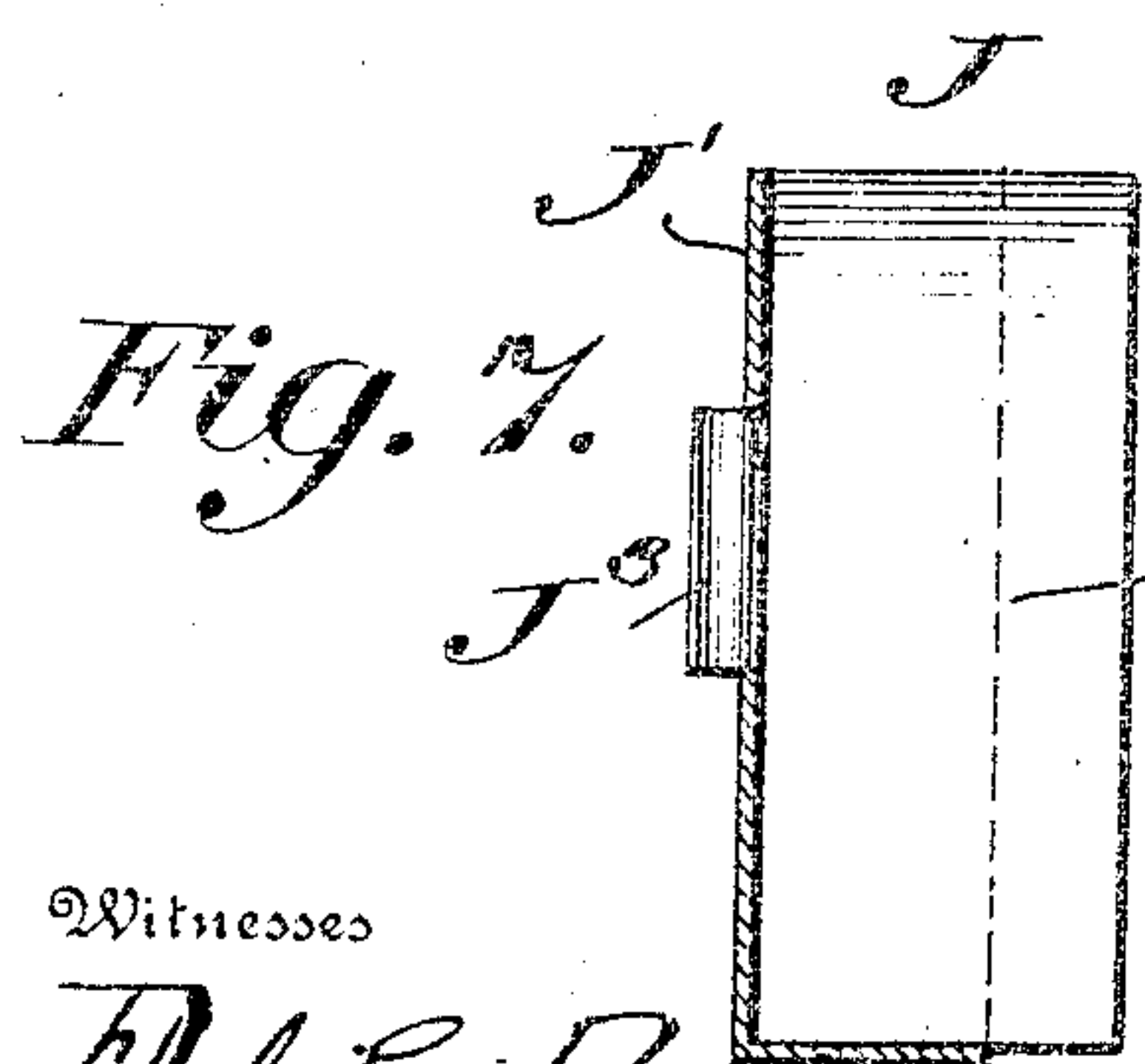
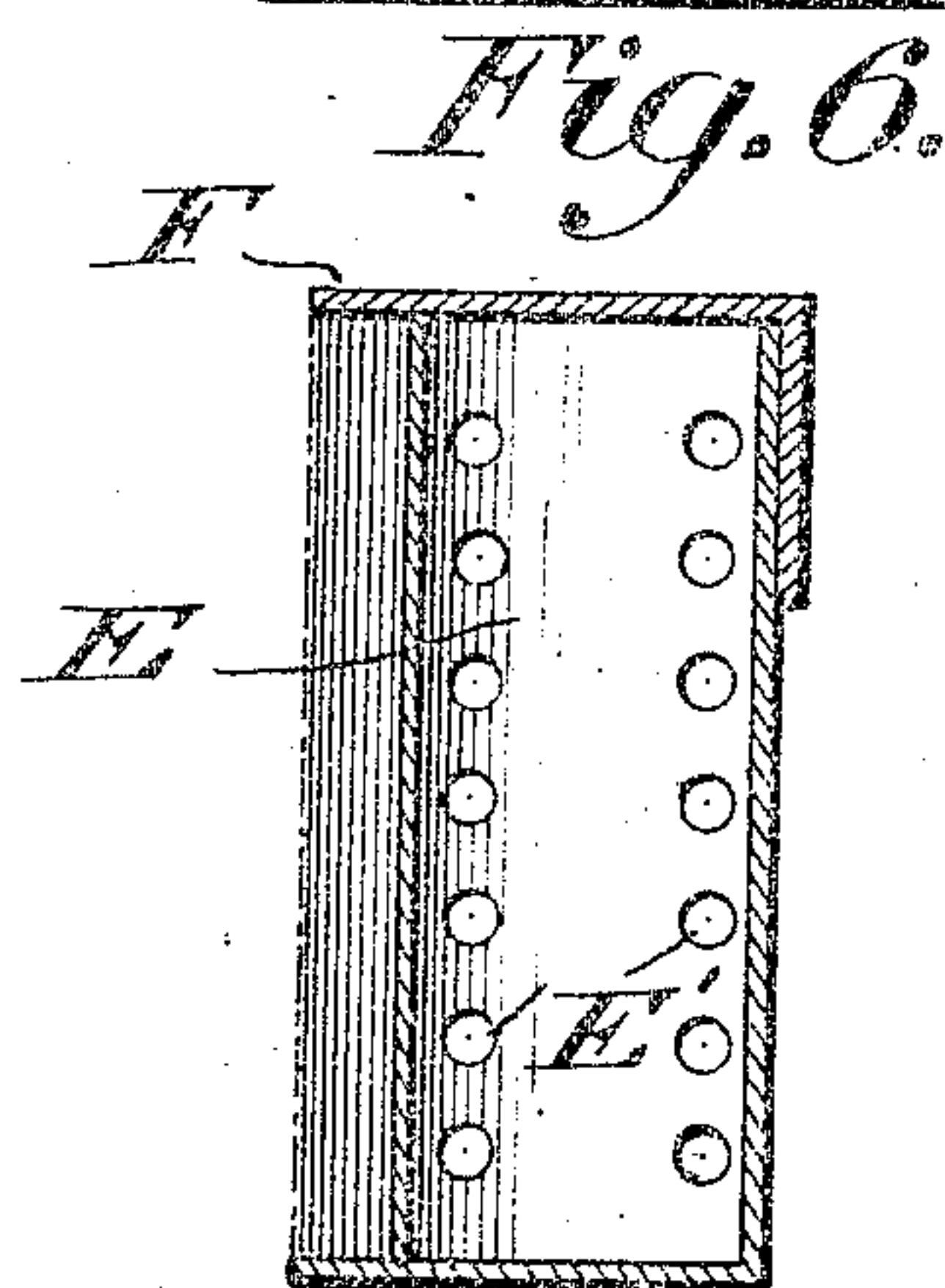
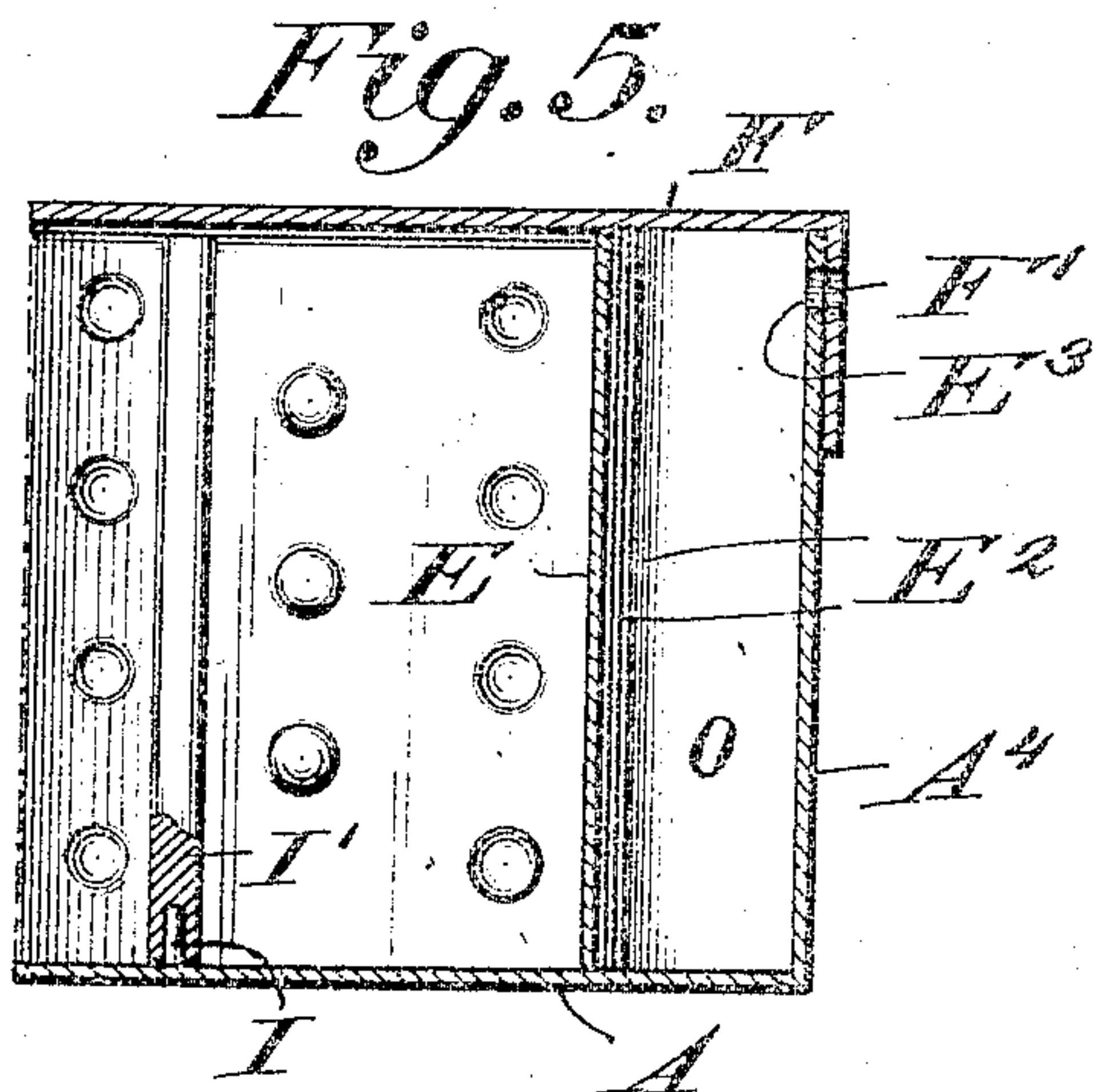
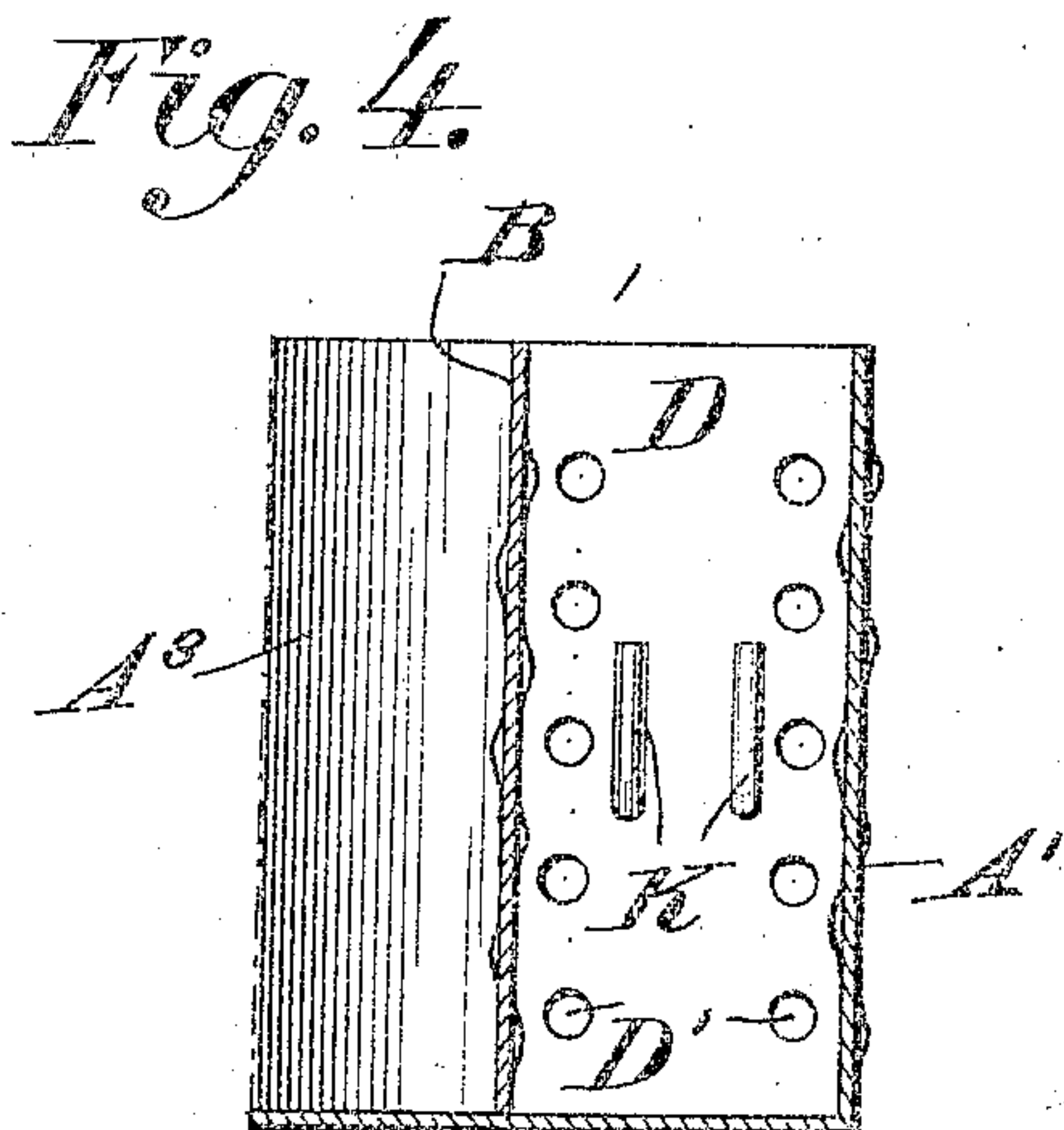
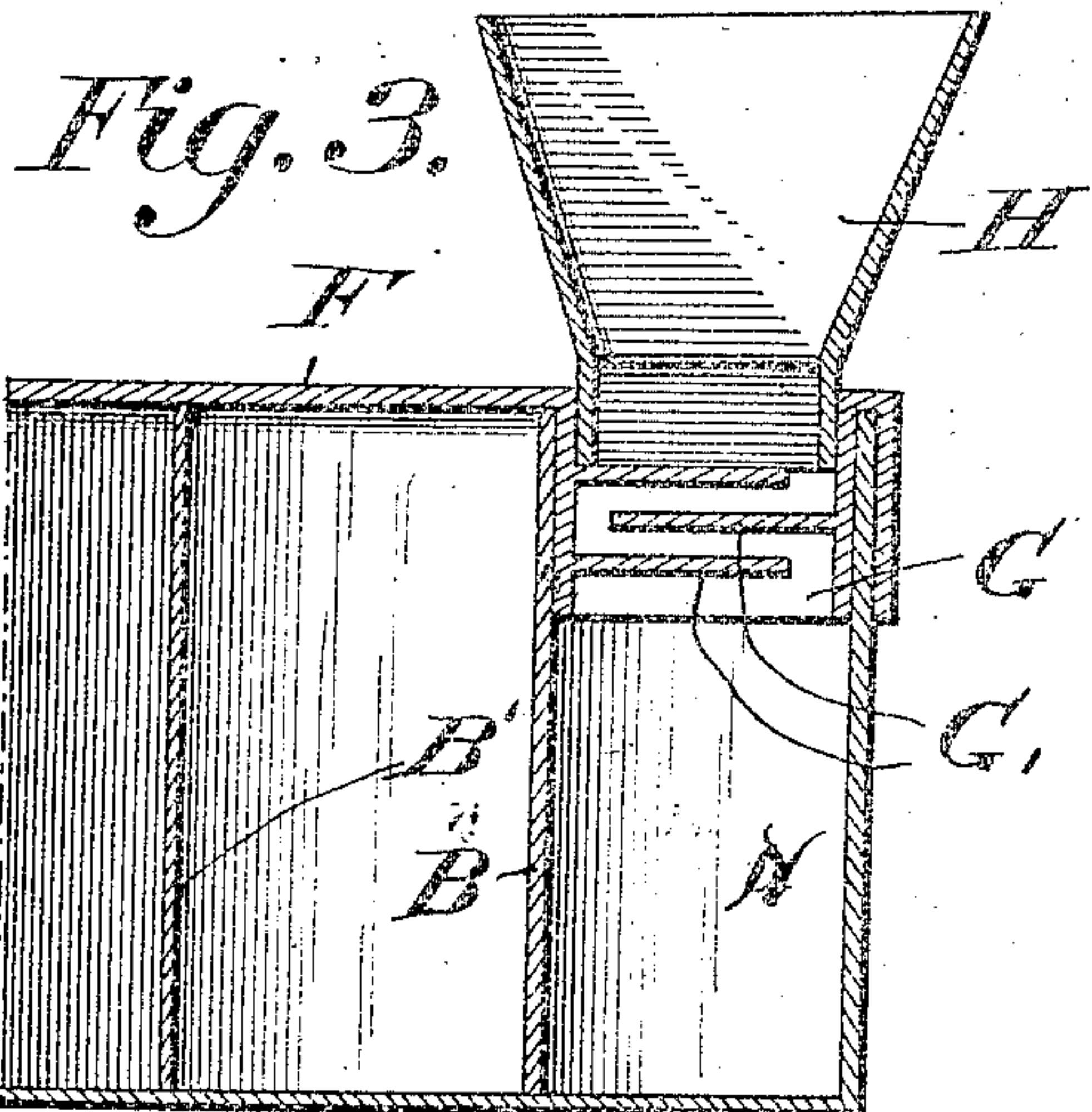
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907,942.

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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM FREDRICK ZIERATH, OF SHEBOYGAN, WISCONSIN.

DEVELOPING, WASHING, AND FIXING BOX.

No. 907,942.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed August 2, 1907. Serial No. 386,795.

To all whom it may concern:

Be it known that I, WILLIAM F. ZIERATH, a citizen of the United States, residing at Sheboygan, in the county of Sheboygan and State of Wisconsin, have invented a new and useful Improvement in Developing, Washing, and Fixing Boxes, of which the following is a specification.

This invention relates to photographic film, developing, fixing and washing tanks, the object being to provide a tank so constructed that the films can be placed therein and developed fixed and washed without handling the same.

Another object of my invention is to provide a tank which will be perfectly light tight and yet be provided with inlet and outlet openings, so that the developing fixing and washing liquid can readily pass there-
through without admitting any light.

With these and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts, hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is a perspective view of my improved tank showing the cover raised. Fig. 2 is a top plan view of the tank with the cover removed. Fig. 3 is a sectional view taken on lines 3—3 of Fig. 2. Fig. 4 is a sectional view taken on lines 4—4 of Fig. 2. Fig. 5 is a sectional view taken on lines 5—5 of Fig. 2. Fig. 6 is a sectional view taken on lines 6—6 of Fig. 2. Fig. 7 is a sectional view through my improved film holder. Fig. 8 is a detail view of a modified form of a partition showing a roller arranged on the end.

Referring to the drawings A indicates a rectangular metallic tank having indentations and projections formed in its sides A', A². Spaced partitions B, B' extend inwardly from the end A³ having indentations and projections formed in their sides, and provided with enlarged rounded ends B². The indentations and projections in the partitions hold the film away from the partitions so as to allow the liquid to circulate between the same. Projecting inwardly from the end A⁴ are spaced partitions C, C' which are also provided with indentations and projections in their sides and enlarged ends C², which divides the tank into opened compartments. The partitions are of the same height as the

sides so that the liquid will have to pass around the ends of the same.

The partition B is connected to the side A' by a partition D, forming a receptacle N and the partition is provided with parallel rows of perforations D', through which the liquid is adapted to pass into the tank.

A partition E connects the partition C to the side A² of the tank forming a receptacle O and the partition is provided with parallel rows of perforations E', through which the liquid passes into the receptacle. The partition and end of the tank in the receptacle is provided with projections E² so as to prevent any light from passing into the tank through the outlet openings E³ formed in the end of the tank leading into the receptacle.

A flanged top F is adapted to fit over the tank and completely closes the same, so that it will be perfectly light tight. An opening F' is formed in the flange of the cover, in alinement with the opening E³ in the receptacle, and the top of the tank is provided with a downwardly projecting spout G fitting into the link D. The opposite sides of the spout being provided with inwardly projecting partitions G' so as to prevent light from passing down into the tank. The neck of a funnel H is adapted to be inserted in the spout G, so that the liquid can be readily poured into the tank.

A stud pin I projects out from the bottom of the tank adjacent the receptacle E, on which is mounted the socket end of a rod I', over which is placed the curled end of the film to be developed, the other end being drawn around through the tank over the ends of the partitions, and secured in a clamping member J, secured to the partition D. The clamping member comprises a split tube J' between the ends of which is arranged a pair of clamping members J² between which the end of the film is clamped. A pair of sockets J³ are secured on the outside of the tube adapted to fit over a pair of spaced pins K, secured to the partition D between the rows of perforations so that the liquid will enter the tank to each side of the film and pass around the partitions and out through the opening in the receptacle.

In the modification shown in Fig. 8, I have shown a partition L, in which is mounted a roller M, over which the film is adapted to travel when inserting the same into the tank, so that it will not be injured.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A tank provided with partitions extending inwardly from its ends, receptacles formed in opposite corners of said tank, a top secured over said tank and means for supporting a film in said tank.
2. A device of the kind described, comprising a tank provided with receptacles at opposite corners provided with parallel rows of perforations communicating with said tank and means for supporting a film in said tank between the rows of perforations of the receptacles.
3. The combination with a tank provided with inwardly projecting partitions at its ends, of receptacles formed at the opposite corners of the tanks, and means for securing a film in said tank adjacent said receptacles.
4. The combination with a tank provided with partitions having indentations and perforations, of receptacles formed in the opposite corners of said tank, and a top secured over said tank.
5. The combination with a tank having partitions extending inwardly from its ends, provided with enlarged ends, of receptacles

formed in the two opposite corners of said tank, and means for supporting a film in said tank.

6. The combination with a tank provided with partitions, of a receptacle formed in one corner of said tank provided with a perforated partition, a receptacle formed in the opposite side provided with a perforated partition and a top adapted to fit over said tank.

7. In a device of the kind described, the combination with a tank having partitions extending inwardly from its ends, of a receptacle formed in the corner of said tank provided with an outlet and rows of perforations communicating with said tank, a receptacle formed in the opposite part of said tank provided with rows of perforations communicating with said tank, and a cover fitting over said tank provided with a spout fitting in said receptacle, having oppositely disposed partitions, for the purpose described.

WILLIAM FREDRICK ZIERATH.

Witnesses:

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