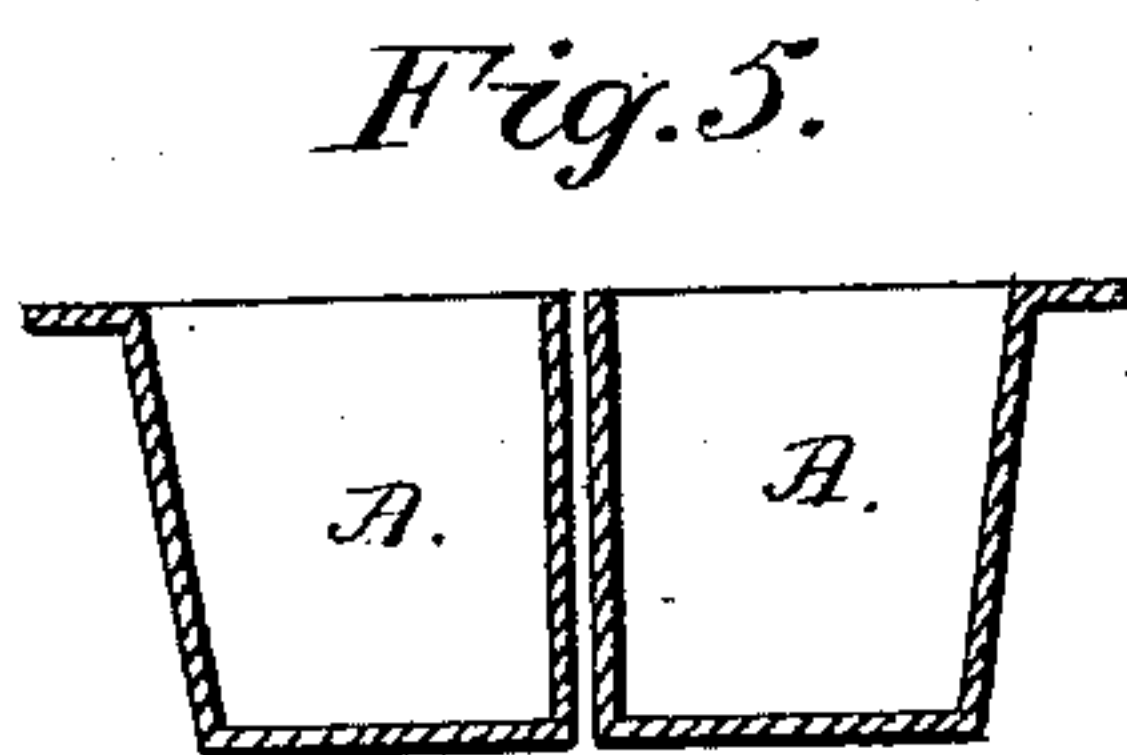
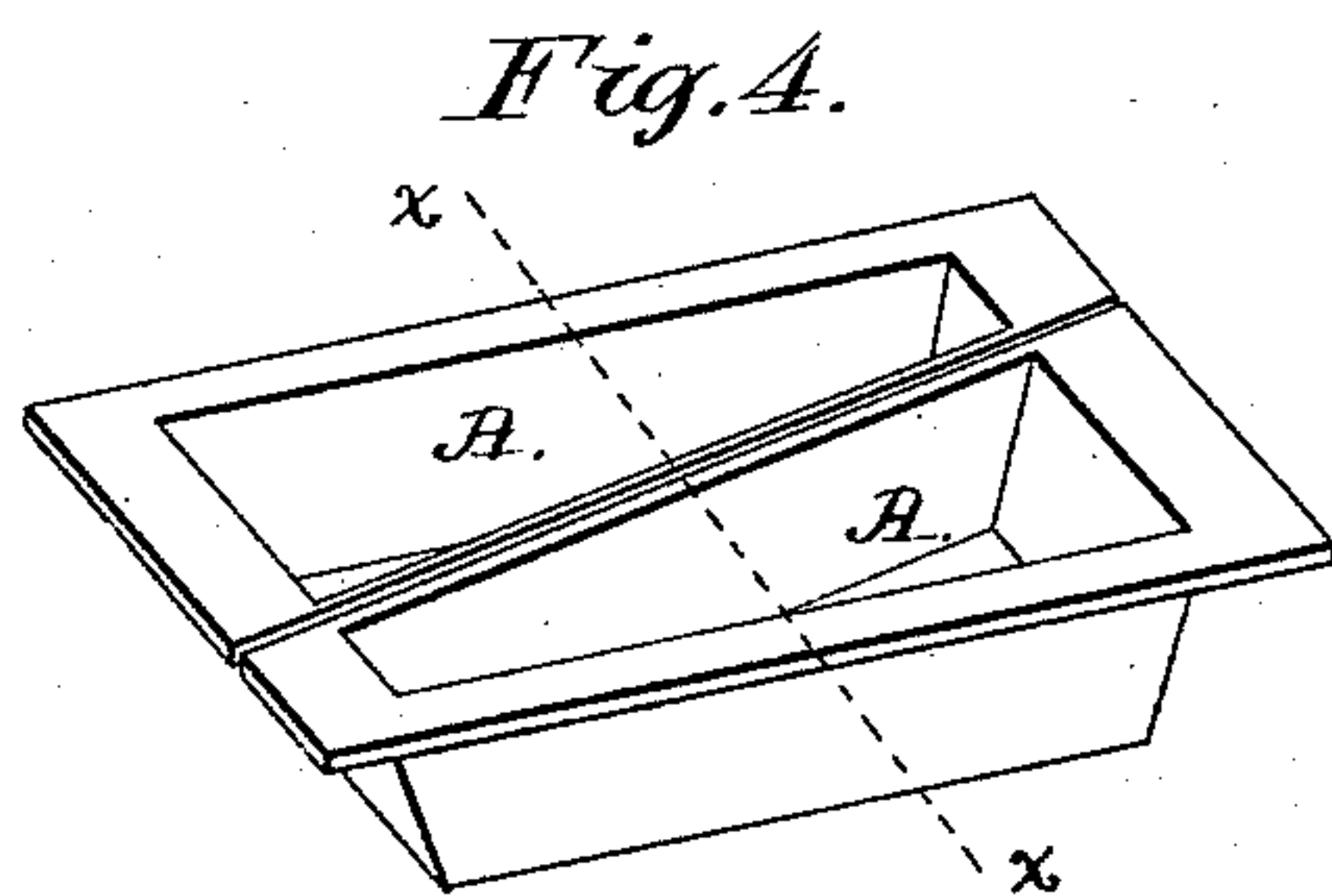
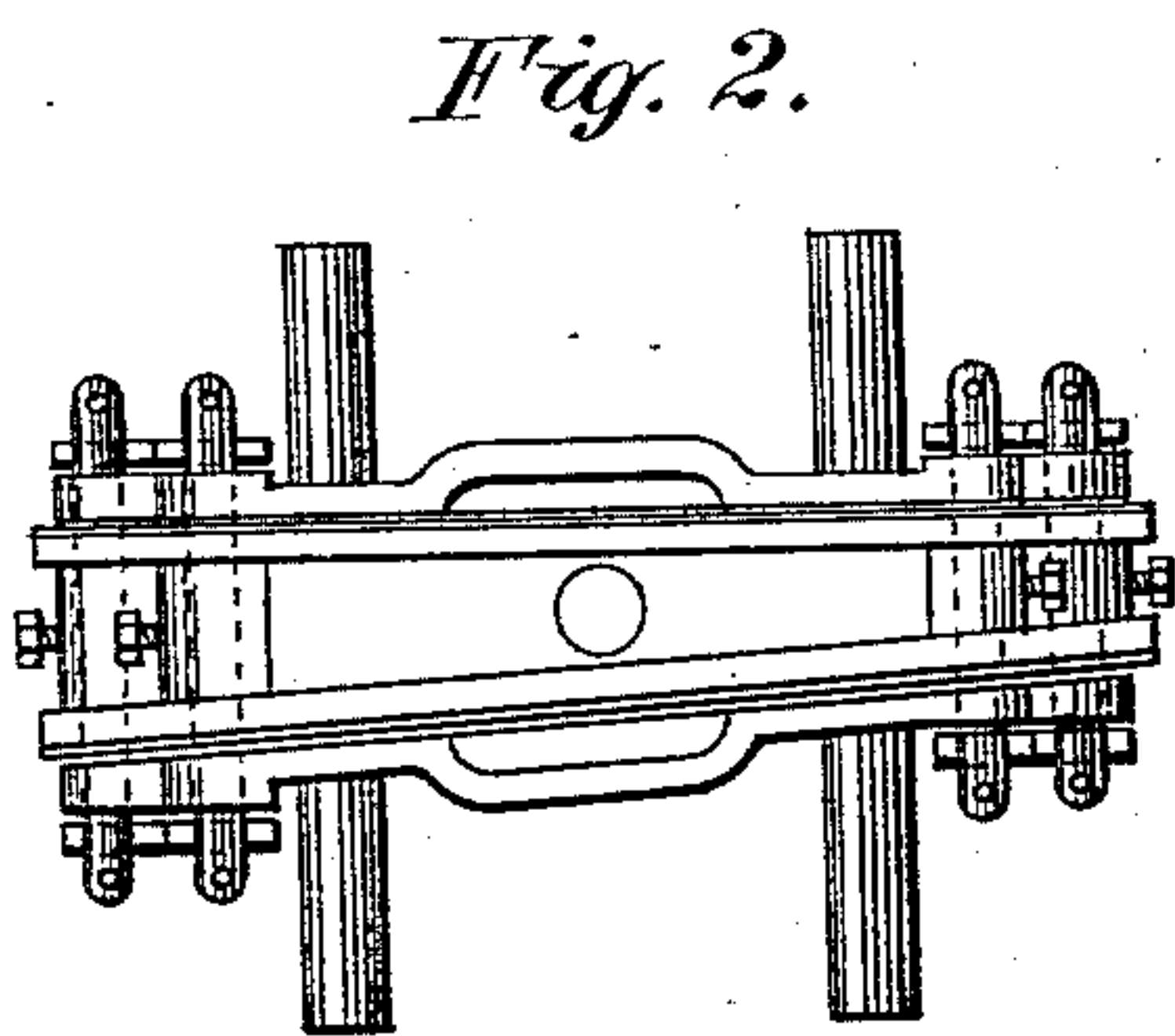
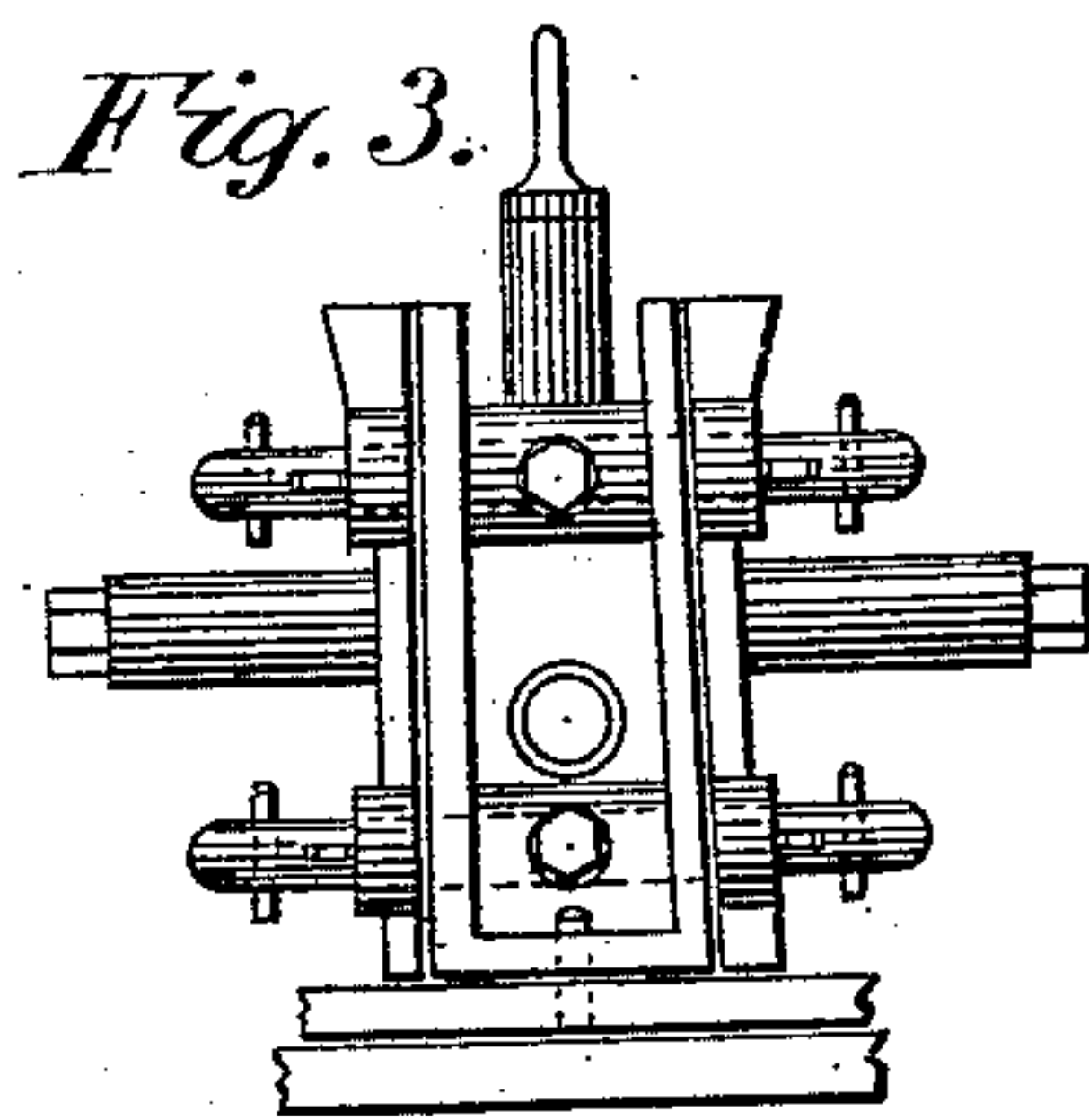
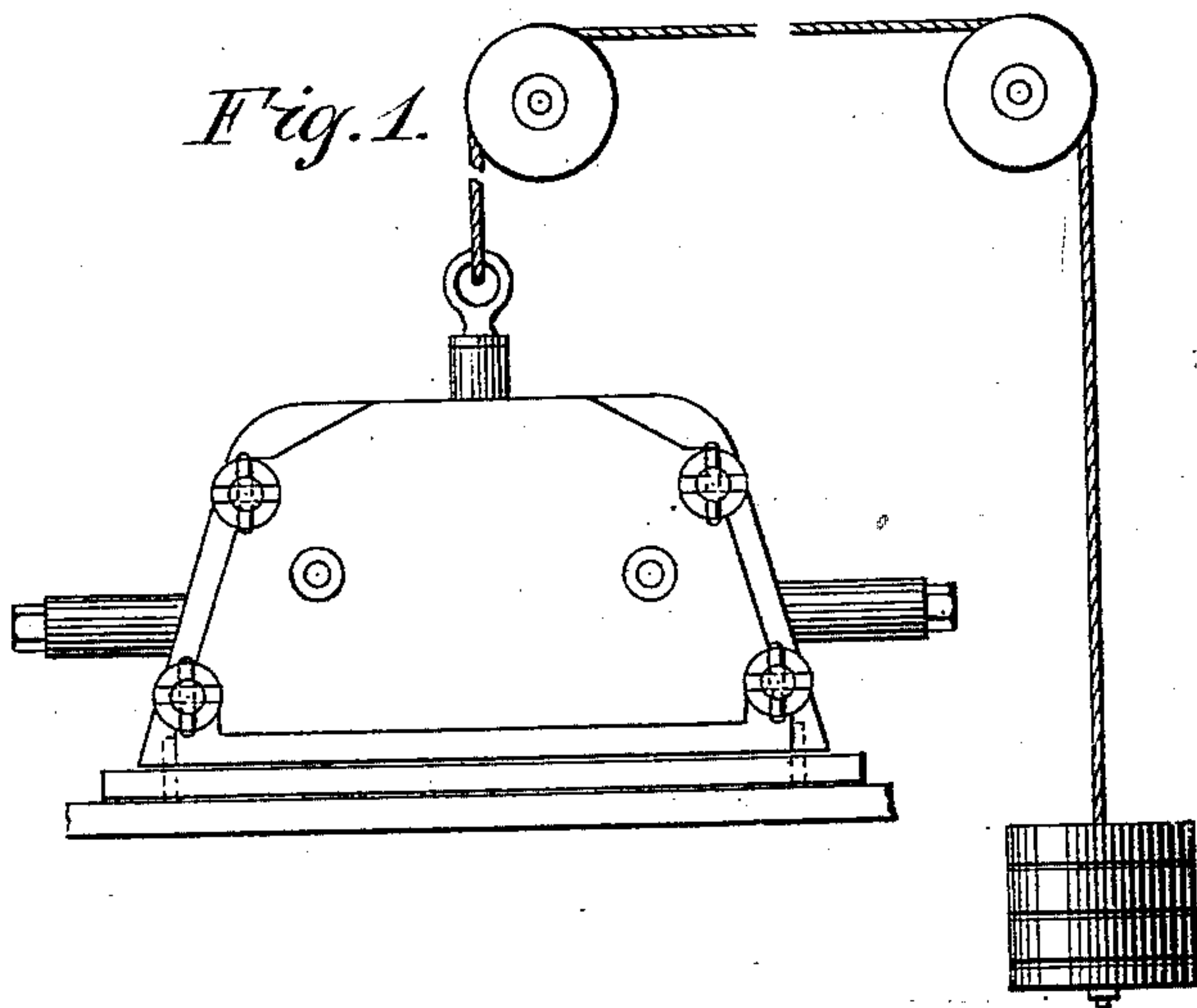


(No Model.)

H. & W. SUTCLIFFE.
WATER CLOSET TANK OR CISTERN.

No. 277,172.

Patented May 8, 1883.



Witnesses.

Alex. Scott
Frank C. Doty.

Inventors.

Henry Sutcliffe
Wright Sutcliffe
By atty. J. N. McPeters

UNITED STATES PATENT OFFICE.

HENRY SUTCLIFFE AND WRIGHT SUTCLIFFE, OF HALIFAX, COUNTY OF YORK, ENGLAND, ASSIGNORS TO HENRY C. MEYER & CO., OF NEW YORK, N. Y.

WATER-CLOSET TANK OR CISTERN.

SPECIFICATION forming part of Letters Patent No. 277,172, dated May 8, 1883.

Application filed October 23, 1882. (No model.)

To all whom it may concern:

Be it known that we, HENRY SUTCLIFFE and WRIGHT SUTCLIFFE, of Halifax, county of York, England, have invented a new and useful Water-Closet Tank or Cistern; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this application.

Our present invention relates to a novel tank or cistern lining, such as shown in another application by us, (now pending in the United States Patent Office,) but not claimed in said other case.

Previous to our invention it has been customary to make cisterns for water-closets of cast-iron, and also to make them of lead surrounded and supported by a wooden box or casing; but in the latter kind of cisterns it has been customary to have the lead body or box-lining, so to speak, composed of two or more pieces of lead of the proper thickness soldered together to form a water-tight receptacle, because of the practical difficulties in the way of forming a receptacle of the proper size and shape of one solid piece of lead of such thickness only as the cistern or body need be when composed of lead and surrounded and supported by a jacket or incasement of wood.

By our invention of a new apparatus for molding such thin vessels or cistern-like receptacles of one solid piece of lead, made the subject of the claims in our other pending application, we have been able to overcome the difficulties which had, previous to our said invention, stood in the way of making a solid cast-lead cistern body or lining adapted to be used in connection with the usual incasing and supporting wooden box, and have thus been enabled to produce, as a new or improved article of manufacture, a solid cast-lead cistern body or lining, which, while it may be made as thin as may be desirable, will have no joints in it.

Our invention consists, then, in a solid cast-

lead lining or thin cistern body or vessel adapted to be used in combination with the ordinary wooden incasement or supporting-box.

To enable those skilled in the art to make and use our invention, we will now proceed to more fully describe it, referring by letters to the accompanying drawings, forming part of this specification, and in which, at Figures 1, 2, and 3, we have shown the apparatus by which and the manner in which we mold the solid-lead cistern or lining. Fig. 4 is a perspective view of, and Fig. 5 is a cross-section of, the lining or solid-lead cistern.

We need not in this application describe or explain the construction and operation of the contrivance shown at Figs. 1, 2, and 3, since that is all fully set forth in our other pending case hereinbefore referred to, and we therefore herein only make reference to the specification of our said other case for an understanding of the shown appliances by which and of the manner in which we cast the article seen at Figs. 4 and 5.

It will be seen that the lining or cistern body A is cast solid, of lead, and of a thickness sufficient only to form a suitable strong and durable seamless metallic receptacle, for use in combination with a wooden box or surrounding case such as usually employed to surround and support the heretofore commonly made sheet-lead cistern-linings for such boxes.

What we claim in this case as a new and improved article is—

A solid cast-lead cistern body or lining adapted for use in combination with the ordinary supporting and surrounding wooden case or box, as set forth.

In witness whereof we have hereunto set our hands this 2d day of October, 1882.

HENRY SUTCLIFFE.
WRIGHT SUTCLIFFE.

In presence of—

HARTLEY HITCHEN,
ALBERT FARRAR.