

(No Model.)

A. HANSON.
SIFTER.

No. 567,711.

Patented Sept. 15, 1896.

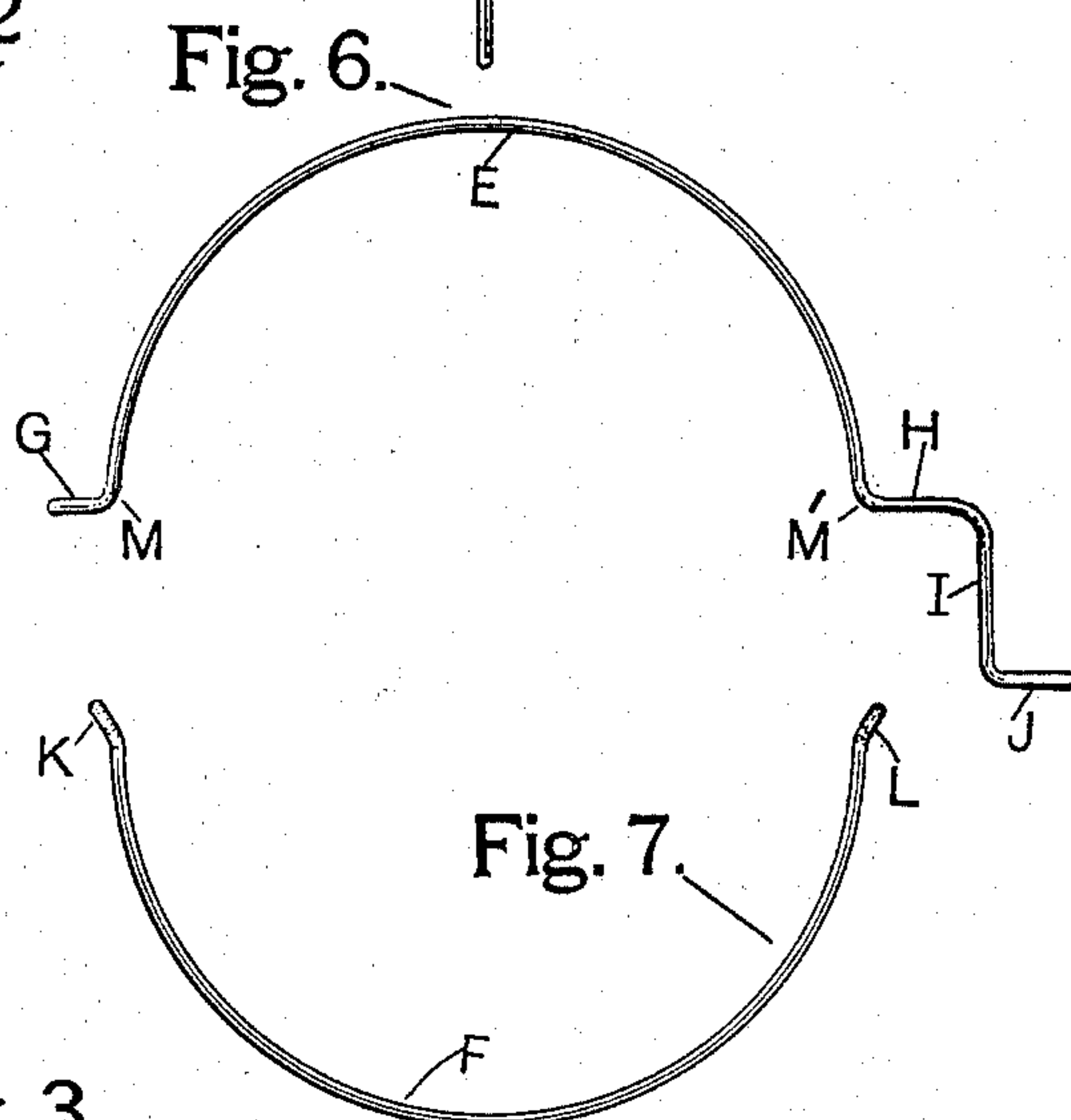
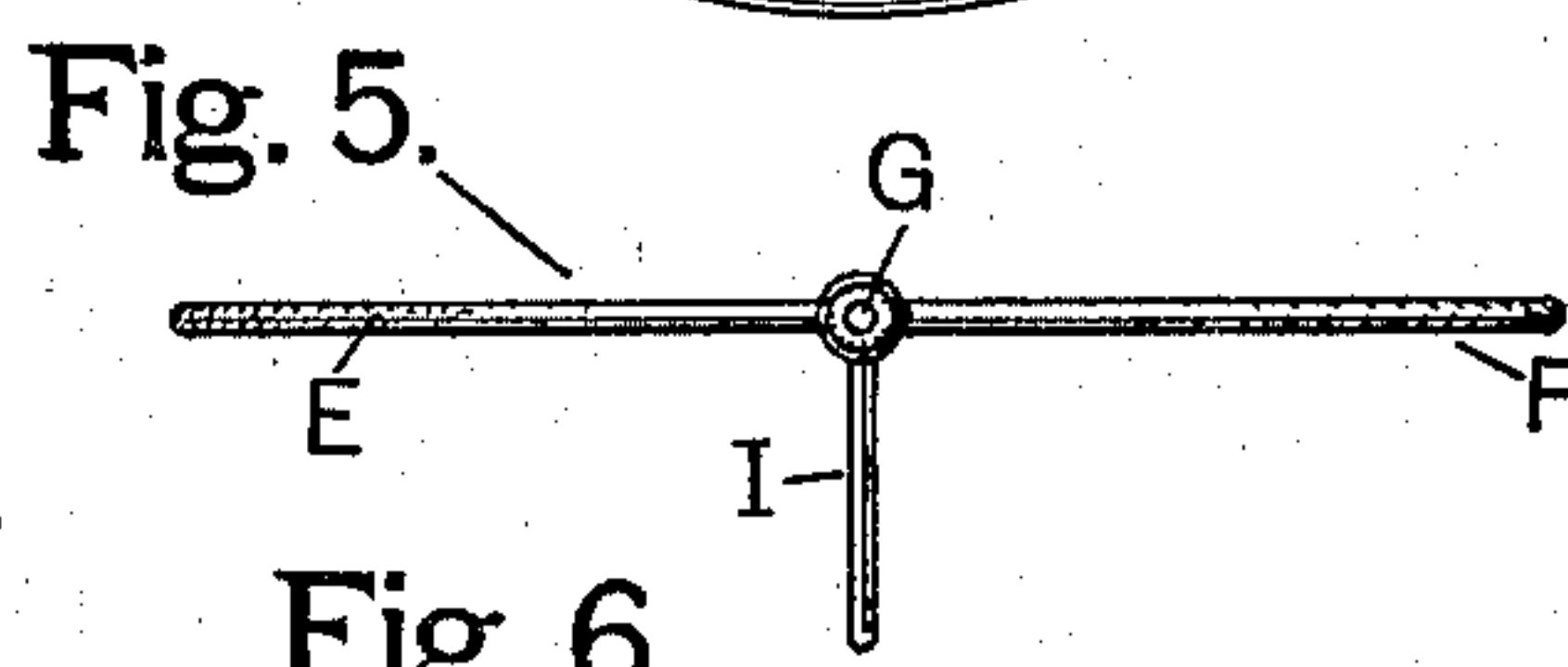
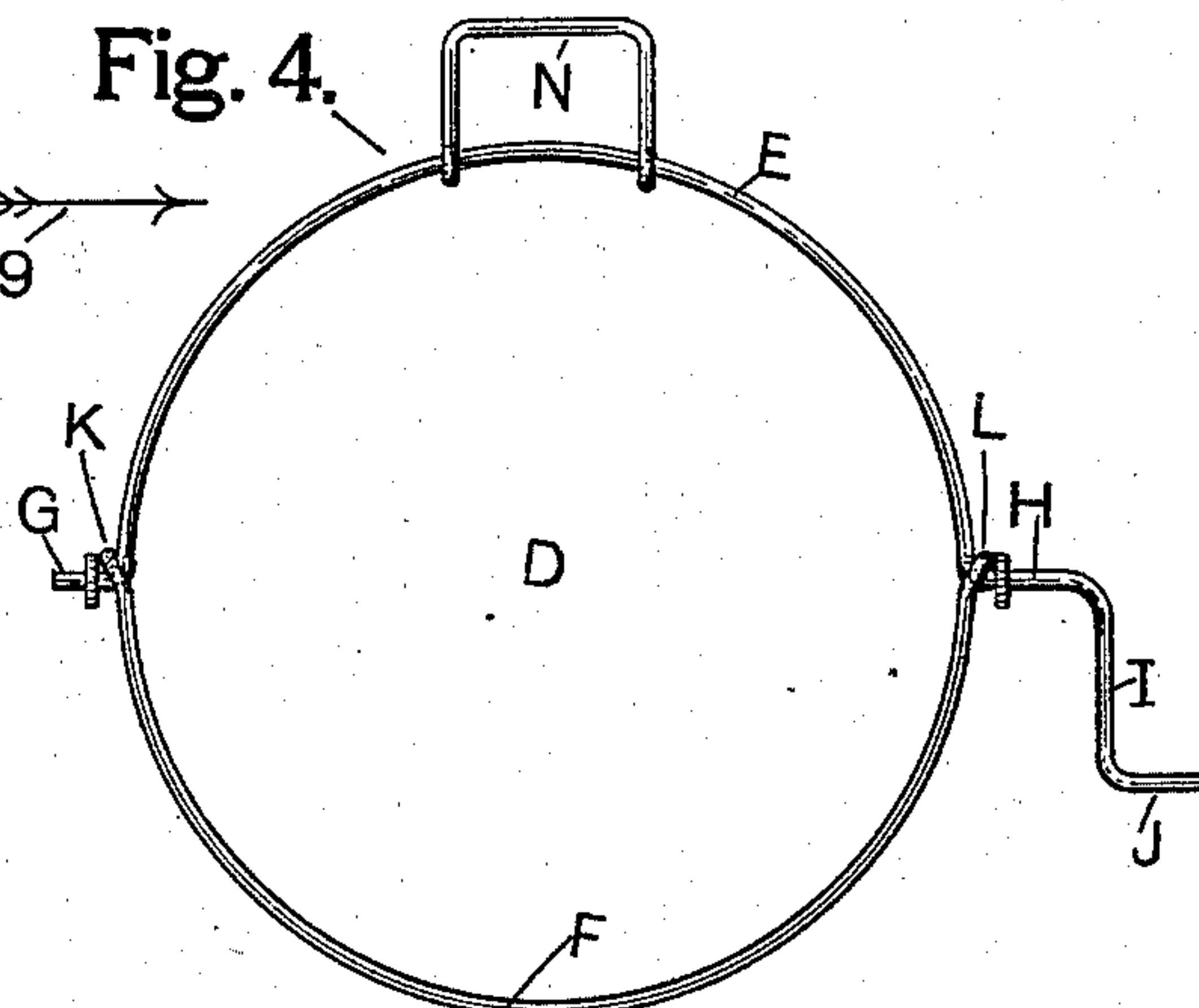
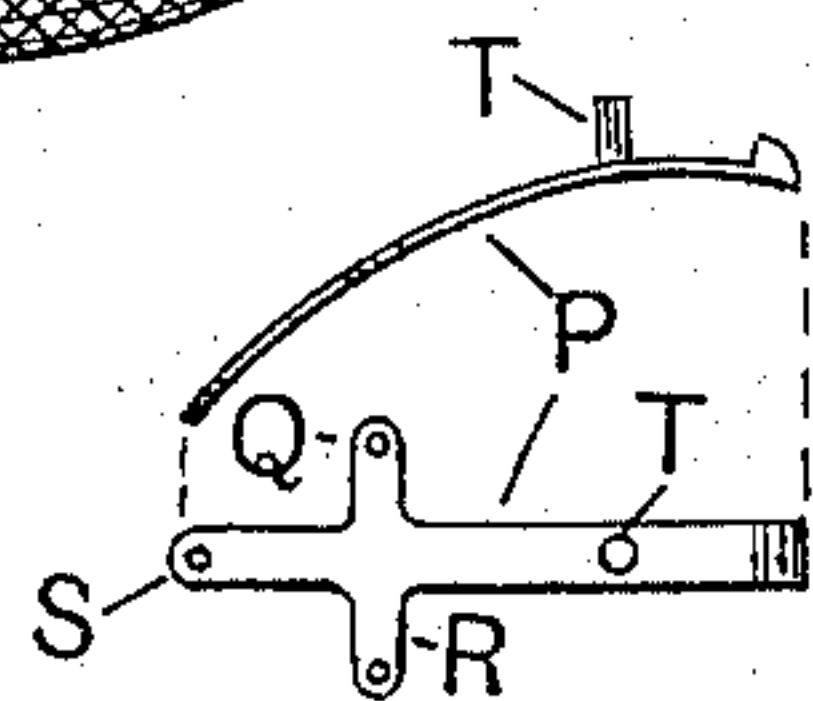
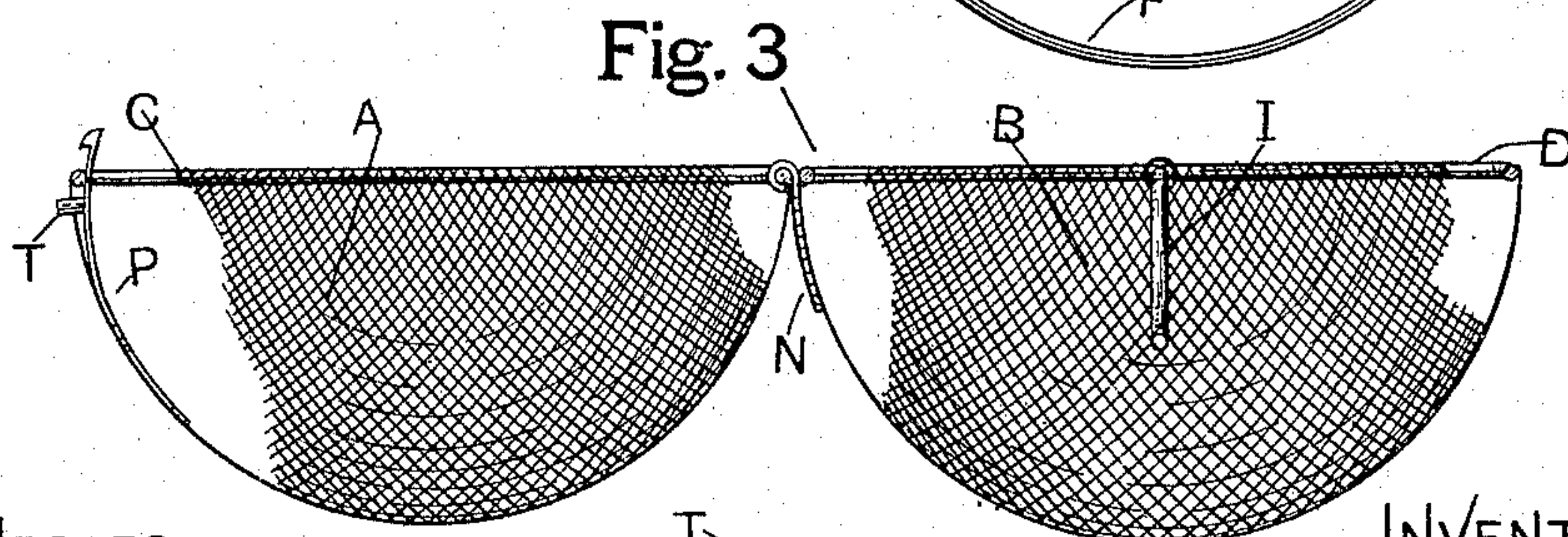
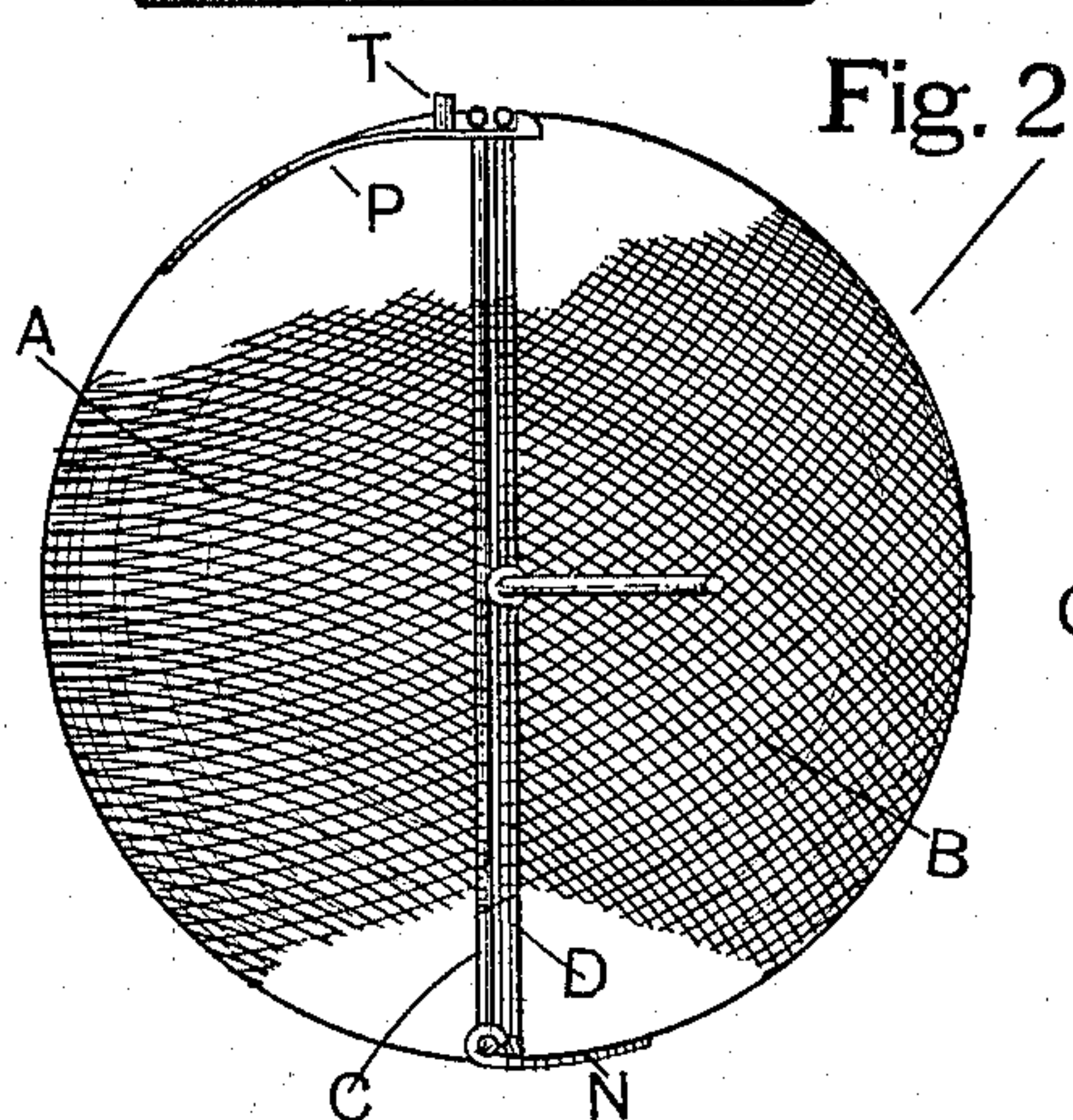
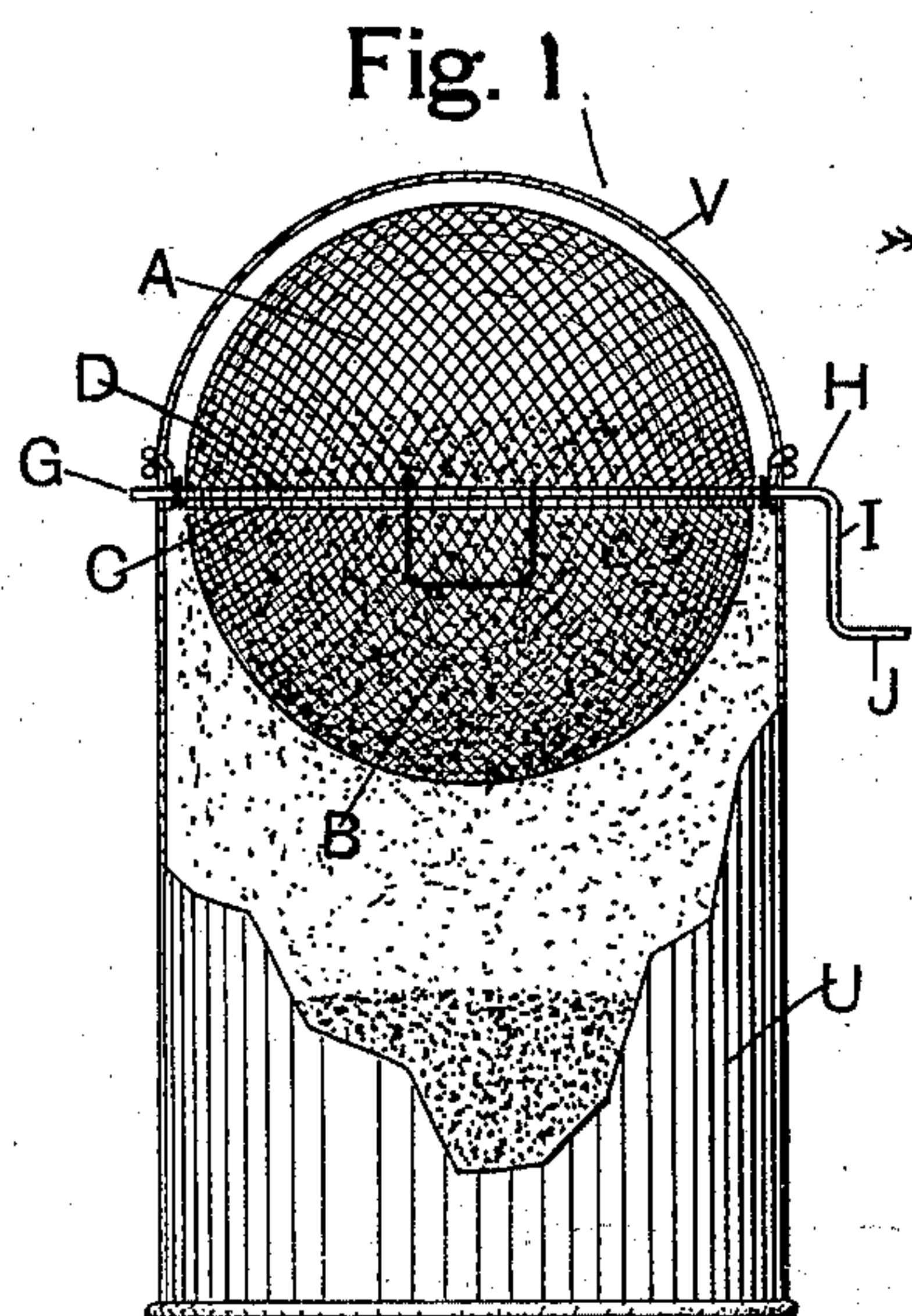


Fig. 7.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ALEXANDER HANSON, OF CHICAGO, ILLINOIS.

SIFTER.

SPECIFICATION forming part of Letters Patent No. 567,711, dated September 15, 1896.

Application filed January 2, 1896. Serial No. 574,030. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER HANSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Sifter, of which the following is a specification.

My invention relates to sifters, and my object is to provide a construction which is durable, efficient, and not complicated, and which may be used for a variety of purposes simply by a change in size and of the mesh of the screen by which the work intended is accomplished, the several parts and the method of operating the same being described hereinafter, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation showing the sifter in position in an ordinary cylindrically-shaped can, the top and a portion of the body of the latter being shown broken away to an axial section. Fig. 2 is an end elevation of the sifter with portions of the screen shown broken away at the sides to illustrate method of hinging the two hemispherical screens together, also showing the construction of a spring-latch by which the two hemispheres are held together when ready for duty. Fig. 3 is an end elevation of the two hemispherical screens in the unlatched and open position ready to receive a charge of material to be sifted. Fig. 4 is a plan of the pivotal ring with the hinge attached thereto, and is hereinafter more fully described. Fig. 5 is an end elevation of the pivotal ring without the hinge as the ring appears when looking in the direction as indicated by arrow 9, Fig. 1. Fig. 6 shows one half of the pivotal ring as it appears when separated from the hinge and from the other half, which latter is shown in Fig. 7. Fig. 8 shows, respectively, a side elevation and a plan of the spring-latch.

Similar letters indicate like parts throughout the several views.

The two hemispheres A and B are made of wire woven together to form meshes of suitable size for the particular duty to be performed.

This sifter is ordinarily intended for the purpose of separating ashes from coal, and the meshes in the sieves are necessarily coarse.

Each hemisphere is secured at the marginal edge to a strong hoop or circle of round rod,

the hemisphere A having an ordinary plain hoop C, and hemisphere B is provided with a hoop D, which is composed of two sections E and F.

The section E is bent into the form shown in Fig. 6, which not only comprises one-half of the hoop D, but also is bent so as to form a journal G at one end and a journal H at the other, together with a crank I and crank-handle J. Section F is provided with loops or eyes K and L at opposite ends, which loops inclose a portion of section E at the bends M and M' where the journals end and the ends of the semicircular portion begin, the loops being pressed hard upon the section E and hard-soldered in position, and thus form the construction shown in Fig. 4, with the exception of the hinge N, which has the form of three sides of a rectangle, the ends of the hinge being formed into loops which loosely clasp a portion of the hoop E, the other portion of the hinge being secured to the opposite hemisphere A by means of wire or by hard solder.

At P is a latch, which is usually made of spring-steel, with two lateral projections Q and R and a prolongation S, each having a perforation near the end through which wire or rivets may pass to secure the latch to the wire sieve of one of the hemispheres. The outer free end of the latch is formed into a hook, which projects sufficiently beyond the hoop C to engage the hoop of the opposite hemisphere, Fig. 2.

Attached to the latch is a projection T, which serves as a push-button for operating the latch inwardly and detaching the hook thereof when it is desired to open the sifter.

The latch P having a position inside the sifter, the impact of any heavy pieces of material in the operation of sifting cannot detach the hook and open the hemispheres.

The receptacle for holding this sifter is usually a cylindrical vessel like U, Fig. 1, which is slotted at the top down a short distance, the bottom of the slots forming a bearing for the journals G and H.

The top V of the receptacle is usually hemispherical, and at the lower margin is also slotted to fit down close to the above-named journals, so that when sifting materials containing very fine light particles none can fly

out at the journal-bearings, thus adapting the apparatus to use within the house for sifting ashes or any other similar duty.

I claim as my invention—

- 5 The combination in a sifter of two hollow hemispheres A and B composed of wire woven in open meshes, hoops C and D secured to the marginal edges of the hemispheres, a hinge connecting the hoops at one side and
10 a spring-latch adapted to detachably connect the hoops at the opposite side from the hinge and form a globular-shaped receptacle, journals projecting from opposite sides of one of

the hoops and one of the journals terminating in a crank, the journals mounted in bearings with the receptacle within a containing vessel and adapted to revolve therein for the purpose stated. 15

In testimony that I claim the foregoing I have hereunto set my hand, this 19th day of 20 November, 1895, in the presence of witnesses.

ALEXANDER HANSON.

Witnesses:

OSCAR SNELL.

HIRAM E. SHOREY.