

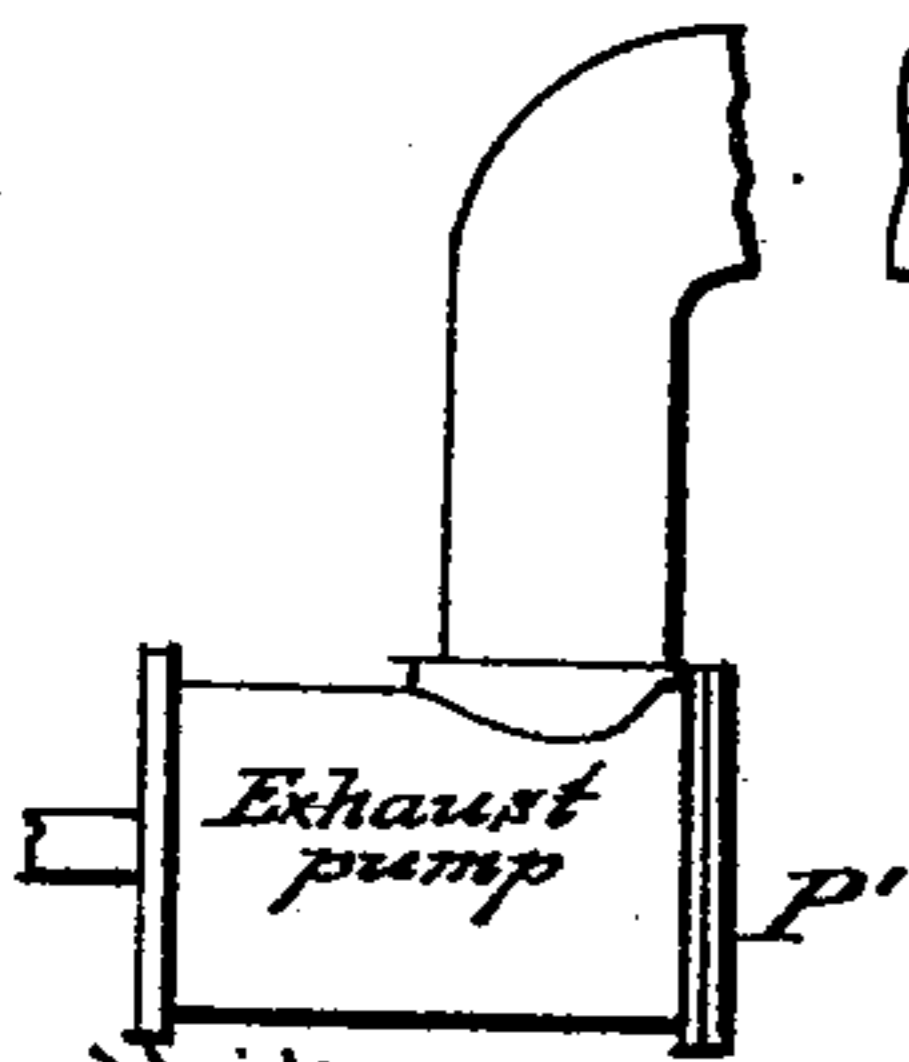
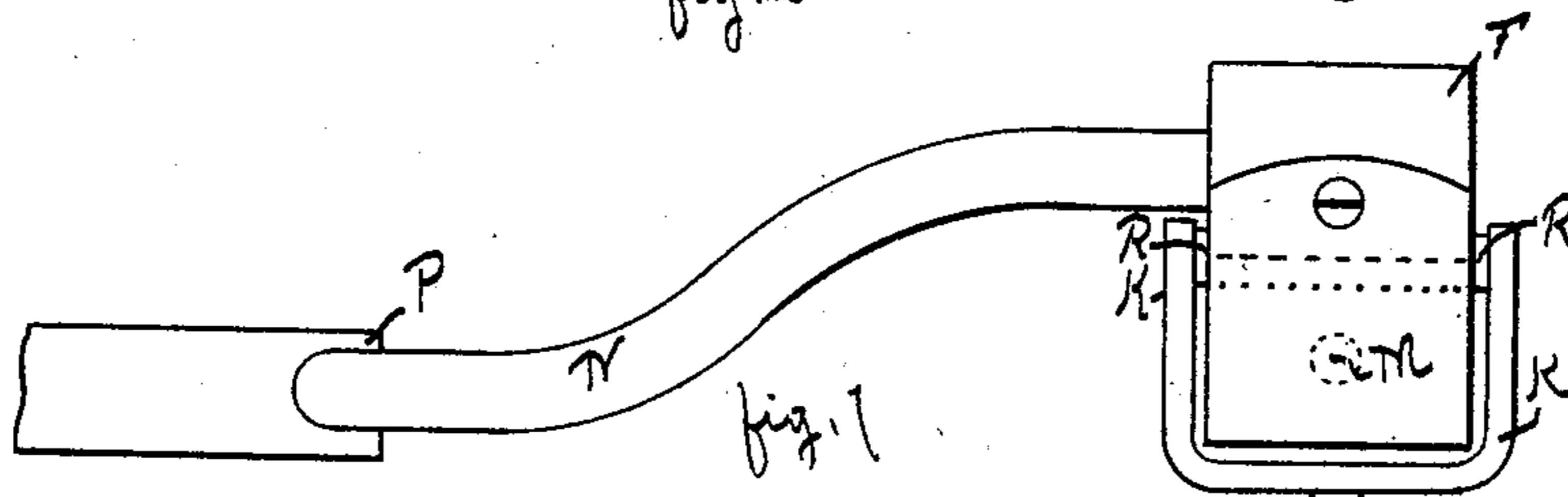
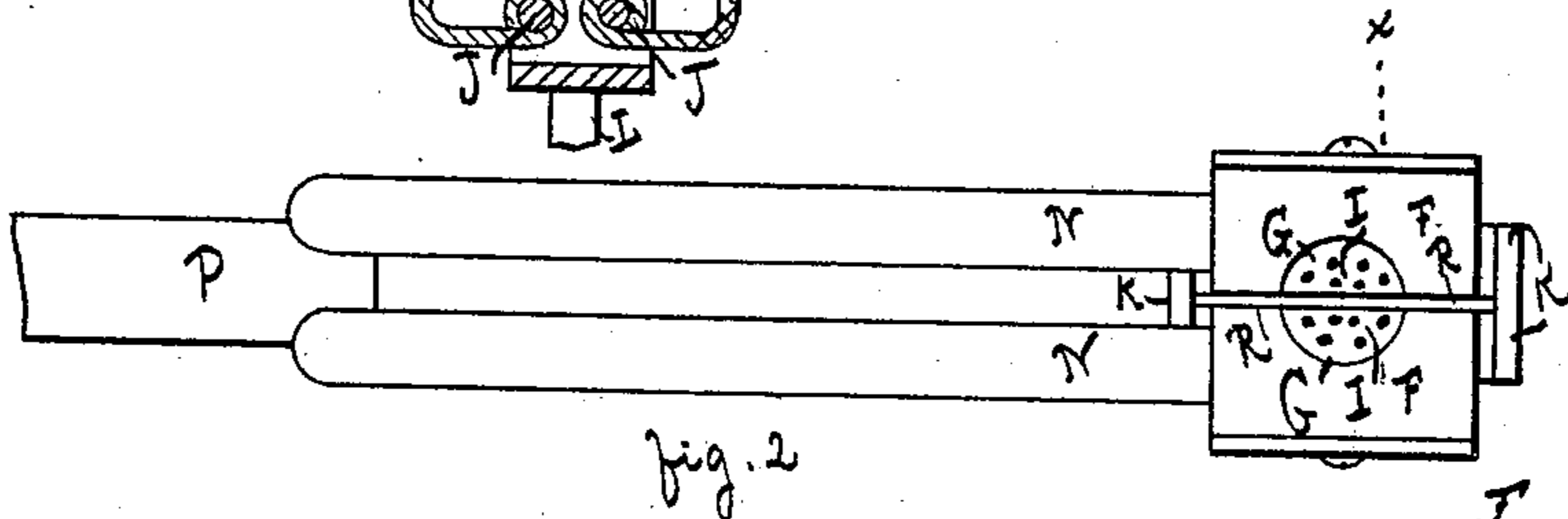
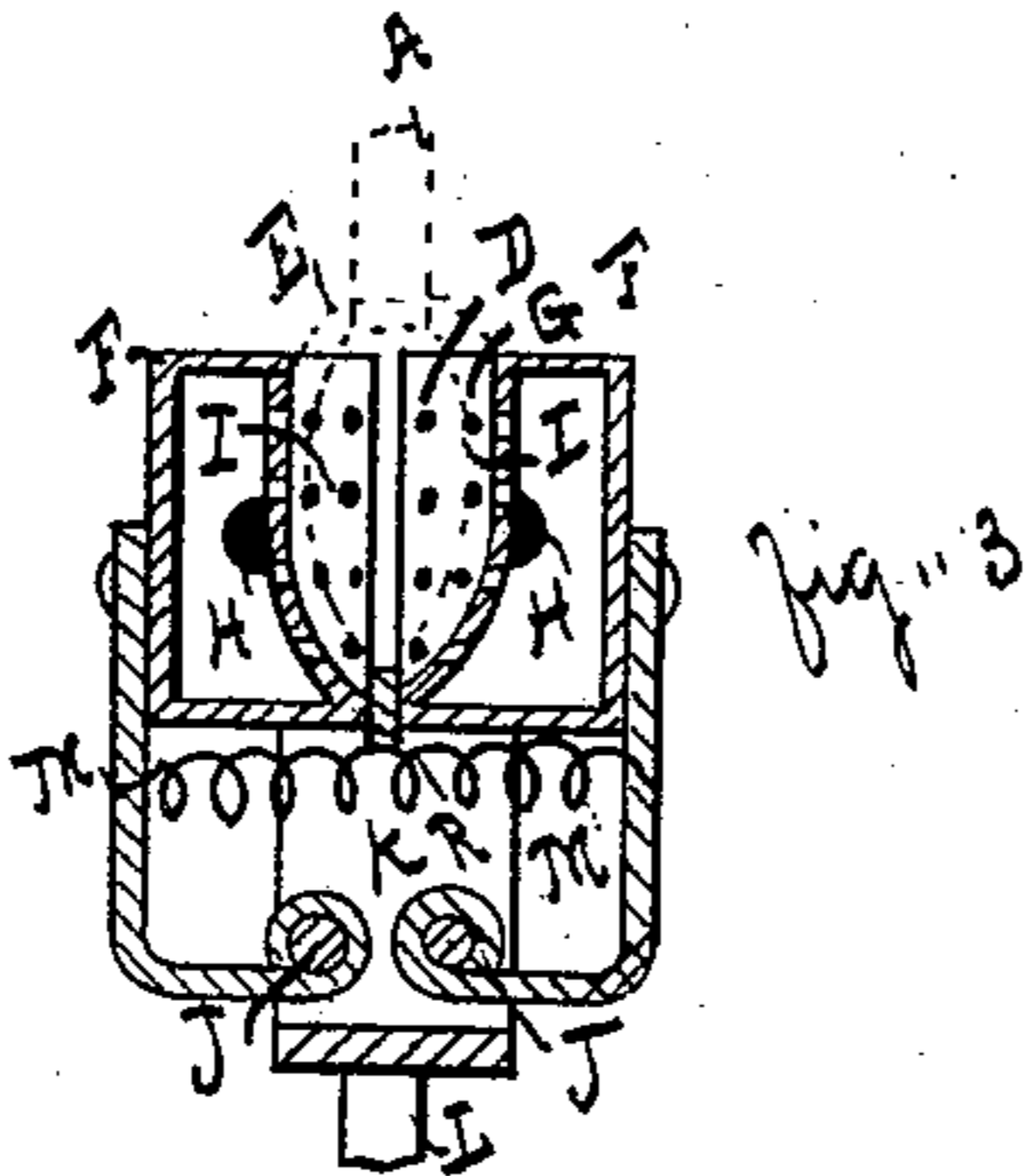
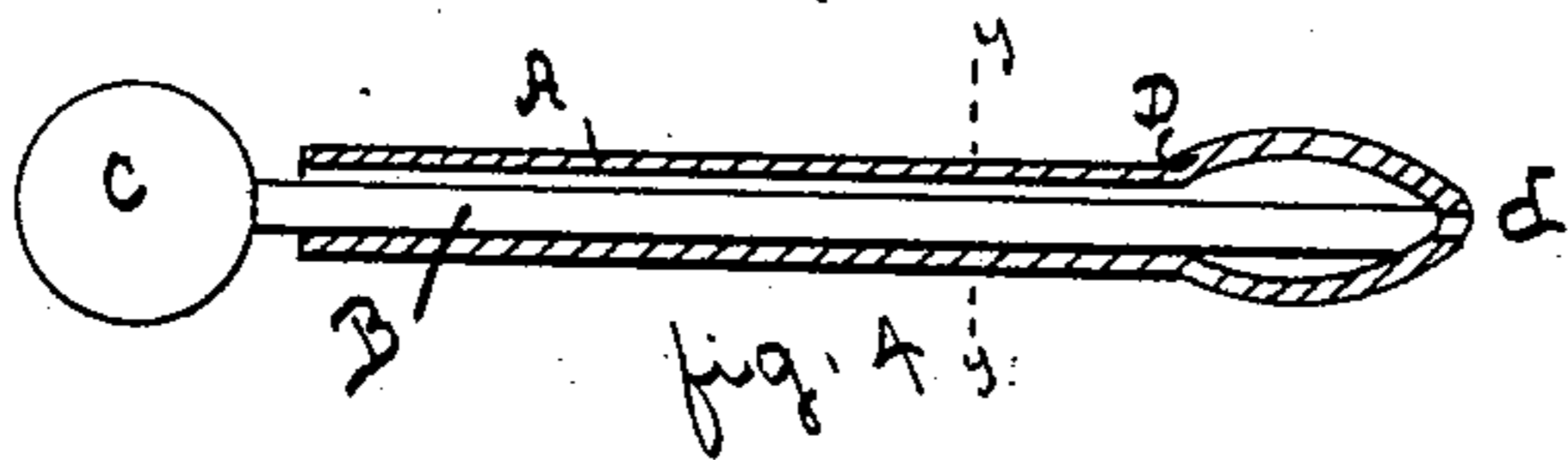
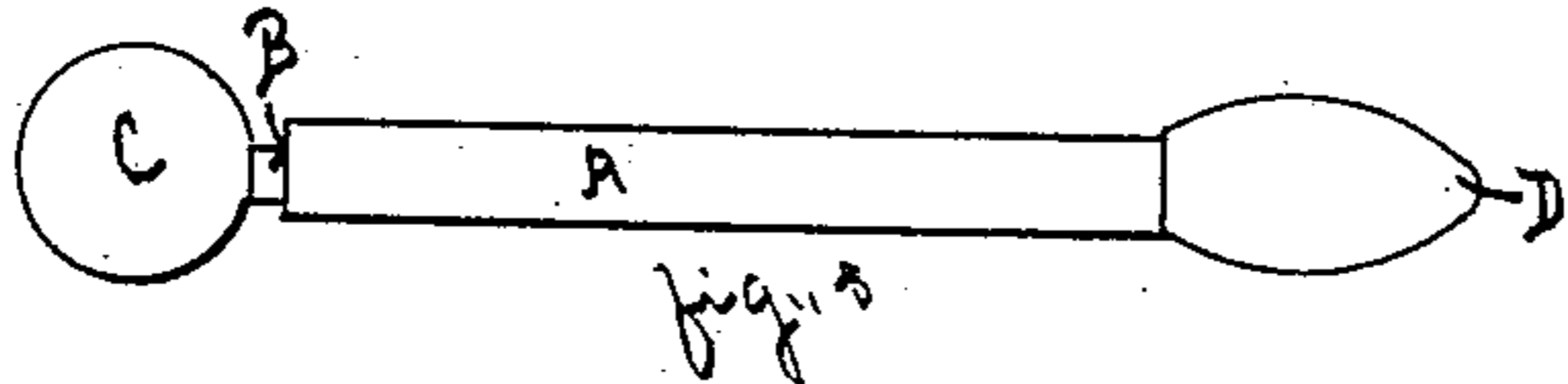
(No Model.)

H. M. FERRY.
CAPSULE STRIPPING MACHINE.

No. 495,407.

Patented Apr. 11, 1893.

B A
fig. 6



Witnesses

Jesse W. Smith
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UNITED STATES PATENT OFFICE.

HENRY M. FERRY, OF DETROIT, MICHIGAN.

CAPSULE-STRIPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 495,407, dated April 11, 1893.

Application filed August 6, 1892. Serial No. 442,329. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. FERRY, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful
5 Improvement in Mechanism for Stripping Soft Capsules from their Molds, of which the following is a specification.

My invention consists in an improvement in mechanism for stripping soft capsules from
10 their molds, hereinafter fully described and claimed.

Figure 1 is a side elevation of one stripper. Fig. 2 is a top plan view thereof. Fig. 3 is a section on line $x-x$, Figs. 1 and 2. Fig. 4 is
15 a longitudinal central section through an improved capsule mold (which forms the subject of a separate application filed contemporaneously herewith). Fig. 5 is a side elevation of said mold and Fig. 6 is a section on
20 line $y-y$, Fig. 4.

F F represent two hollow boxes, preferably of metal, in each of which is formed a chamber G, which is approximately the shape of one-half of a mold having thereon a capsule.
25 The two boxes F F together form a vacuum stripper bar. The boxes F are each secured to one end of a bracket M M, which brackets are pivoted at the points J J in a yoke K, provided with a stem L by which the device is
30 supported on any suitable table or rest.

R represents a spiral spring by which said brackets M M are drawn toward each other so as to hold the boxes F F normally in contact.

I I represent perforations through the walls
35 of the chambers G G, and H H represent openings through the walls of the boxes F F, which openings H are connected by means of pipes N N, (preferably rubber hose) with a pipe P, the other end of which is connected
40 with an exhaust or vacuum pump.

I have only shown the boxes F F of sufficient capacity for stripping a single capsule, but in practice they will be formed long enough to be provided with a number of
45 chambers G to strip a number of capsules at a single operation, in which case the yoke K will be the length of the whole box. In Fig. 3 in dotted lines is shown a capsule mold D, having a stem A, and having a capsule, represented by E, formed thereon, in position
50 within the chamber G.

The operation of my invention is as follows: The capsule being formed in the mold ready to strip, the exhaust pump is set in motion, drawing air through the perforation I. The
55 boxes F F are slightly separated, sufficient to permit the insertion of the mold D with its capsule E, and then permitted to close upon said capsule, when the effect of the exhaust pump will be to cause an air pressure within
60 the capsule, pressing it against the sides of the chambers G G and holding it there while the mold is withdrawn either by hand or by power. As soon as a capsule or a series of capsules is stripped from the mold or molds,
65 the exhaust pump is stopped, when the capsules may be removed either by hand, or by opening the molds when inverted and dropping them out onto any suitable receptacle.

The capsule mold shown in Figs. 4, 5 and 6
70 is peculiarly adapted to co-operate with this stripping mechanism by inverting the boxes F, so that they hang by stem L from an upper support. D represents the mold having a small orifice d in its point, and carried on
75 a hollow stem A. B represents a valve whose stem passes through stem A, adapted to close orifice d . C represents a weight on valve B. When the mold is dipped valve B closes orifice d , and when the mold is inverted, weight
80 C withdraws valve B from orifice d , thus permitting access of air to the interior of the capsule, and facilitating the operation of the stripper bar.

The mold above described is not herein
85 claimed, as it constitutes the subject-matter of a separate application filed of even date herewith, Serial No. 442,328.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A stripper bar for capsules consisting of
90 a two-part hollow bar, each part having formed therein a perforated chamber substantially half the size of the capsule, and an exhaust pump connected with the two parts
95 of said bar, substantially as shown and described.

2. A stripper bar for capsules, consisting of two hollow boxes pivoted in a yoke and normally drawn together by spring pressure, a
100 chamber adapted to receive the capsule formed equally in said two hollow boxes and

perforations in said chambers, and means whereby air may be exhausted from said chamber for removing the capsule from its mold without collapsing, substantially as described.
5

3. The herein described method of stripping a capsule from a mold consisting in holding

the capsule in a chamber by atmospheric pressure and then withdrawing the mold from the capsule or vice versa.

HENRY M. FERRY.

Witnesses:

JESSE M. SMITH,

GERTRUDE H. ANDERSON.