

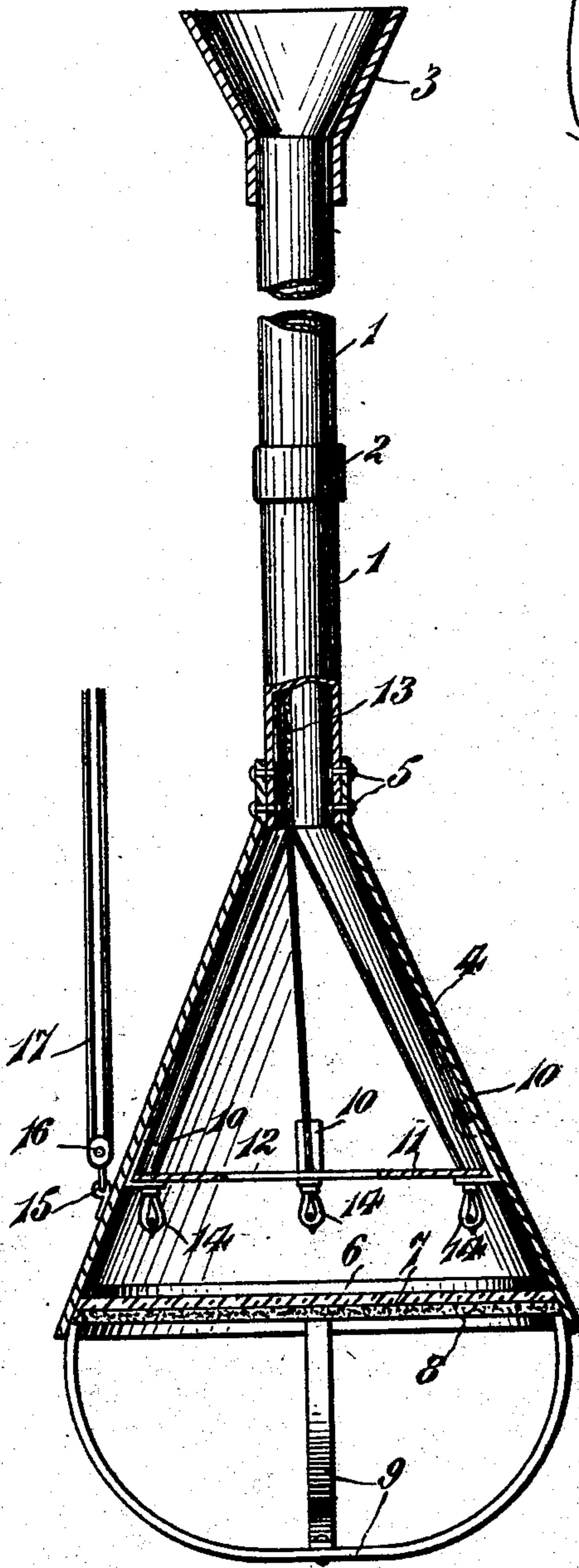
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Draftsman

No. 881,148.

PATENTED MAR. 10, 1908.

D. PÉPIN, Sr.
APPARATUS FOR EXAMINING SUBMERGED BODIES.
APPLICATION FILED MAY 24, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

DÉSIRÉ PÉPIN, SR., OF MONTREAL, QUEBEC, CANADA.

APPARATUS FOR EXAMINING SUBMERGED BODIES.

No. 881,148.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed May 24, 1907. Serial No. 375,456.

To all whom it may concern:

Be it known that I, DESIRÉ PÉPIN, Sr., a subject of the King of Great Britain, residing at the city and district of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Apparatus for Examining Submerged Bodies; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same

My invention relates to apparatus for examining submerged bodies; the object of my invention is to provide in such an apparatus means for reflecting a light downward on the body to be examined, and to provide means for protecting the interior of the apparatus from the water; a further object is to provide an apparatus with a sight tube made in sections, so that it may be adjusted to varying depths; and, my invention consists of the construction, combination and arrangement of parts, as herein illustrated, described and claimed. In the accompanying drawings, forming part of this application, I have illustrated one form of embodiment of my invention, in which drawing similar reference characters designate corresponding parts, and in which: the figure is a vertical section, partly in elevation.

Referring to the drawings, 1—1 designate sections of tubular material movably secured together as by the sleeve 2. By this construction, the tube formed by the sections 1—1 may be lengthened or shortened to suit varying conditions. A removable eye-piece 3 is disposed on the upper end of the upper section 1 of the tube. A frusto conical drum 4 is secured to the lower end of the lowermost tube section 1, as by means of the rivets 5, so as to form a watertight joint. Carried by the drum 4 adjacent its lower end on its inside surface, is a gasket 6, against the lower edge of which is disposed a sheet 7 of transparent material, which is maintained in position against the gasket 6 as by means of a ring 8 of cement or similar material, so that a watertight joint is formed. To protect the transparent sheet 7, suitable guards 9 comprising bowed metallic bands secured at their opposite ends to the drum and at their intersection one to another are provided. Carried on the inner surface of the drum 4, intermediate of its ends, are brackets 10, on which is disposed a mirror 11,

adapted to deflect light downward, and provided with a central opening 12.

Disposed through the tube sections 1 is an electric cable 13, in connection with a suitable source of power, and having on the lower ends of its wires incandescent electric lamps 14, which extend below the surface of the reflecting member 11. The wires to the lamps 14 are passed through the reflecting member 11, and preferably pass through the brackets 10, so that they are kept from swaying. The light from the lamps 14 is reflected downward, so that the objects beneath the apparatus may be surveyed through the tube sections 1 through the opening 12, and through the glass 7.

Secured to the outer surface of the drum 4, adjacent its lower end, is an eye 15, adapted to be engaged by a hook on a common form of block 16, through which block is disposed a flexible member 17, by means of which the apparatus may be raised and lowered, and by means of which the apparatus may be suspended so that it may be easily adjusted.

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

1. In a device of the character described, the combination comprising, tube sections, a sleeve adapted to telescopically receive said sections, a frusto-conical drum rigidly secured to one of said tube sections and an eye-piece removably carried by the other of said tube sections, brackets attached to the inner face of said frusto-conical section, a horizontally mounted mirror carried by said brackets and adapted to reflect light downwardly, electric lights carried by said brackets and mounted directly beneath said mirror and a transparent closure for the lower end of the drum.

2. In a device of the character described, the combination comprising, tube sections, a sleeve adapted to telescopically receive said sections, a frusto-conical drum rigidly secured to one of said tube sections and an eye-piece removably carried by the other of said tube sections, brackets attached to the inner face of said frusto-conical section, a horizontally mounted mirror carried by said brackets and adapted to reflect light downwardly, electric lights carried by said brackets and mounted directly beneath said mirror, a transparent closure for the lower end of the drum, and a guard for said closure.

3. In a device of the character described,
the combination comprising, tube sections, a
sleeve adapted to telescopically receive said
sections, a frusto-conical drum rigidly se-
cured to one of said tube sections and an eye-
piece removably carried by the other of said
tube sections, brackets attached to the inner
face of said frusto-conical section, a hori-
zontally mounted mirror carried by said
brackets and adapted to reflect light down-
wardly, electric lights carried by said brackets
and mounted directly beneath said mirror, a

transparent closure for the lower end of the
drum and a guard for said closure, said guard
comprising bowed bands secured at their op- 15
posite ends to the drum.

In witness whereof I have hereunto set my
hand in the presence of two witnesses.

DÉSIRÉ ^{his} + PÉPIN, SR.
mark

Witnesses:

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