

(No Model.)

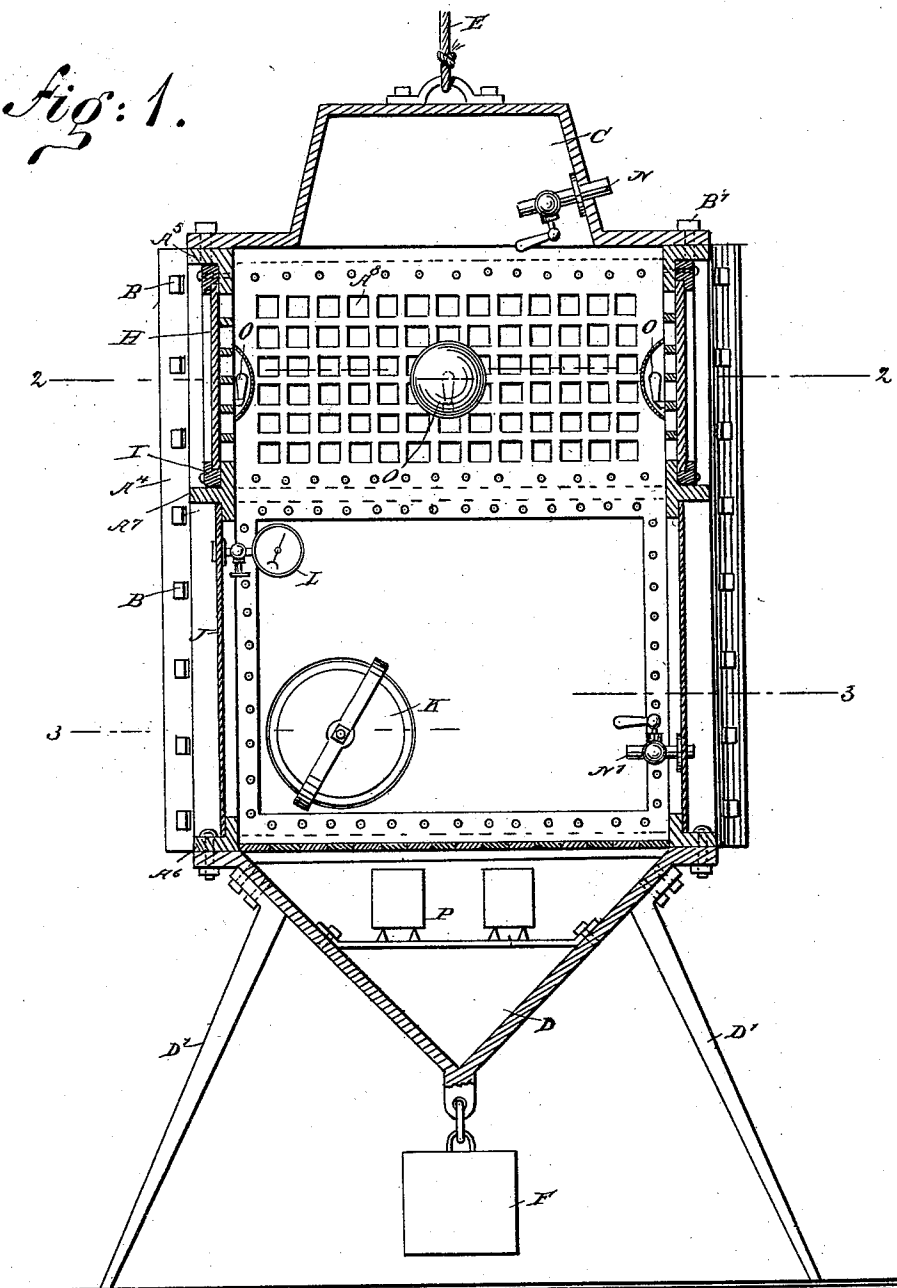
2 Sheets—Sheet 1.

H. SCHON.
DIVING APPARATUS.

No. 543,756.

Patented July 30, 1895.

Fig: 1.



WITNESSES:

Chas. Nida.
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ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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fig: 2.

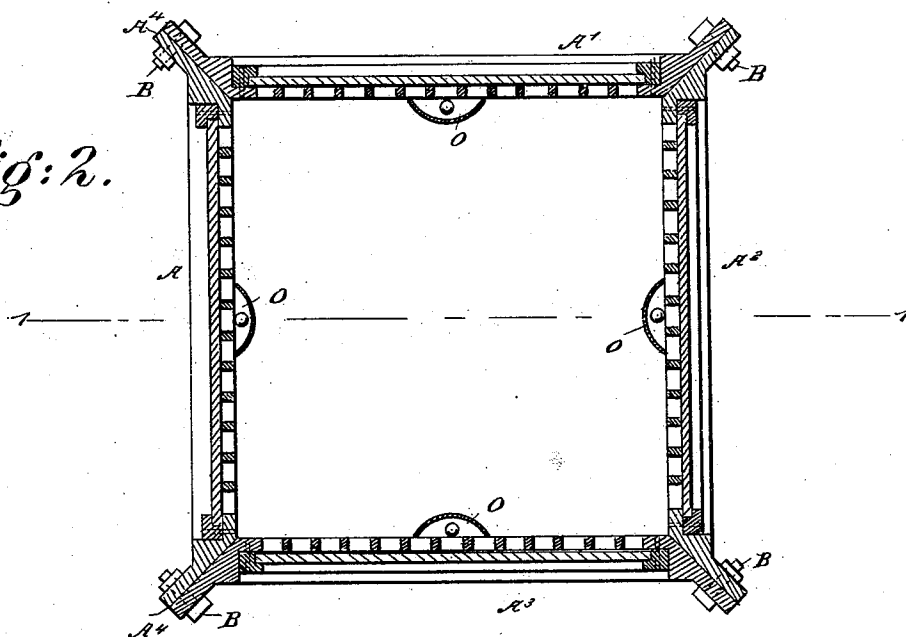
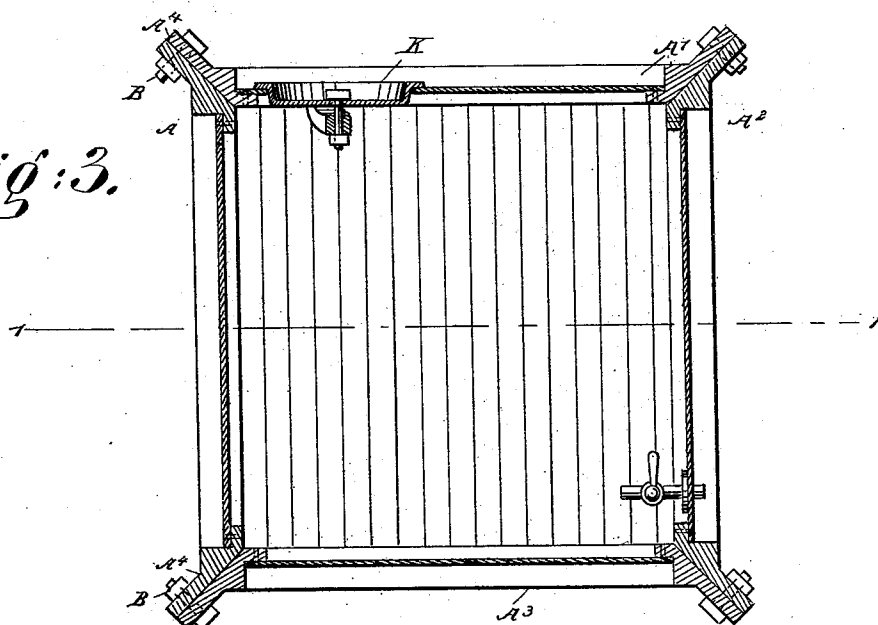


fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HUBERT SCHON, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR TO HIMSELF,
ANTON LUTZ, AND GEORGE MUTH, OF SAME PLACE.

DIVING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 543,756, dated July 30, 1895.

Application filed June 10, 1895. Serial No. 552,320. (No model.)

To all whom it may concern:

Be it known that I, HUBERT SCHON, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and improved Diving Apparatus, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved apparatus more especially designed for properly locating sunken vessels preparatory to raising the same.

The invention consists principally of a casing provided with frames having angular flanges bolted together, panels set and fastened in the said frames, a top bolted to the upper end of the casing and adapted for connection with a cable, and a bottom bolted to the lower end of the said casing and carrying a weight.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement on the lines 1 1 of Figs. 2 and 3. Fig. 2 is a sectional plan view of the same on the line 2 2 of Fig. 1, and Fig. 3 is a like view of the same on the line 3 3 of Fig. 1.

The improved diving apparatus is provided with four side frames A, A', A², and A³, each provided with vertical flanges A⁴ extending at an angle of about forty-five degrees to abut on an adjacent flange of the next following side, the said abutting flanges being rigidly connected with each other by suitable bolts B. The upper ends of the side frames A A' A² A³ are formed with horizontal flanges A⁵, forming one continuous flange around the casing to receive the top C, fastened by bolts B', to the several flanges A⁵. A bottom D is bolted to flanges A⁶ on the lower ends of the said frames, as plainly indicated in Fig. 1, so that a casing is formed composed of the said frames, the hollow top C, and the corresponding bottom D. The top C is connected with

a cable E for raising or lifting the apparatus, and on the lower end of the bottom D is held a weight F for pulling the apparatus under water to the vessel or other object, the proper location of which is desired.

Each of the side frames A A' A² A³ is provided with a horizontal cross-bar A⁷ in the form of a T, so as to divide each side frame into an upper and lower portion, of which the upper portion is formed with openings like a grating A⁸, on the outside of which is fitted a panel of glass H, or other transparent or translucent material, the said panel being securely fastened in position by a frame I, bolted or otherwise attached to the side frame. The lower portion of each side frame is open and is adapted to be closed by a panel J, made of bronze or other suitable material. Now, by the arrangement described the upper portion of the casing admits light, and the glass panels also permit rays of light to pass from the inside of the casing to the outside—that is, through the surrounding water to the object to be located.

In one of the sides—as shown, the side A'—(see Fig. 3,) is arranged a manhole K, and in the adjacent side A is arranged an indicator L, preferably attached to the corresponding panel J and serving to indicate the pressure of the surrounding water. The top C is provided with a valved air-pipe N, and a similar air-pipe N' is arranged in the lower portion of the casing, the said devices serving to admit air to or exhaust air from the said casing.

In the upper portion, at the gratings A⁸, are arranged electric lights O, fed or supplied with electricity from accumulators P, arranged in the bottom D of the casing. The latter is also provided with legs D' to permit of supporting the apparatus on the top of a vessel or on the ground, as the case may be.

Now, it will be seen that by the arrangement described a diving apparatus can be constructed of sufficient size to permit two or more persons to occupy the casing for several hours without requiring a change of air. The apparatus, by being lighted from the inside, permits the occupants to closely examine and

locate a sunken vessel or other object at the time the apparatus is lowered from a wrecking-steamers by the cable E.

It is understood that the device is primarily intended for locating the position of sunken vessels, but it is evident that the device may be readily utilized for other purposes.

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

1. A diving apparatus, comprising a casing provided with side frames having angular flanges bolted together, panels set and fastened in the said frames, a top bolted to the upper end of the said casing, and adapted for connection with a cable or other lifting de-

vice, and a bottom bolted to the said casing and carrying a weight, substantially as shown and described.

2. A diving apparatus, comprising a casing provided with side frames having flanges bolted together, panels set and fastened in the said frames, and electric lights held in the said casing, and adapted to shed their light through the said panels, to permit the occupants of the apparatus to observe the surrounding water and objects therein, substantially as shown and described.

HUBERT SCHON.

Witnesses:

FRANK VENERKLY,
E. P. ZITTERBART.