No. 849,444. PATENTED APR. 9, 1907.

J. S. WEISER.

PUMP SUPPORT.

APPLICATION FILED OCT. 31, 1906.

Fig. 1.

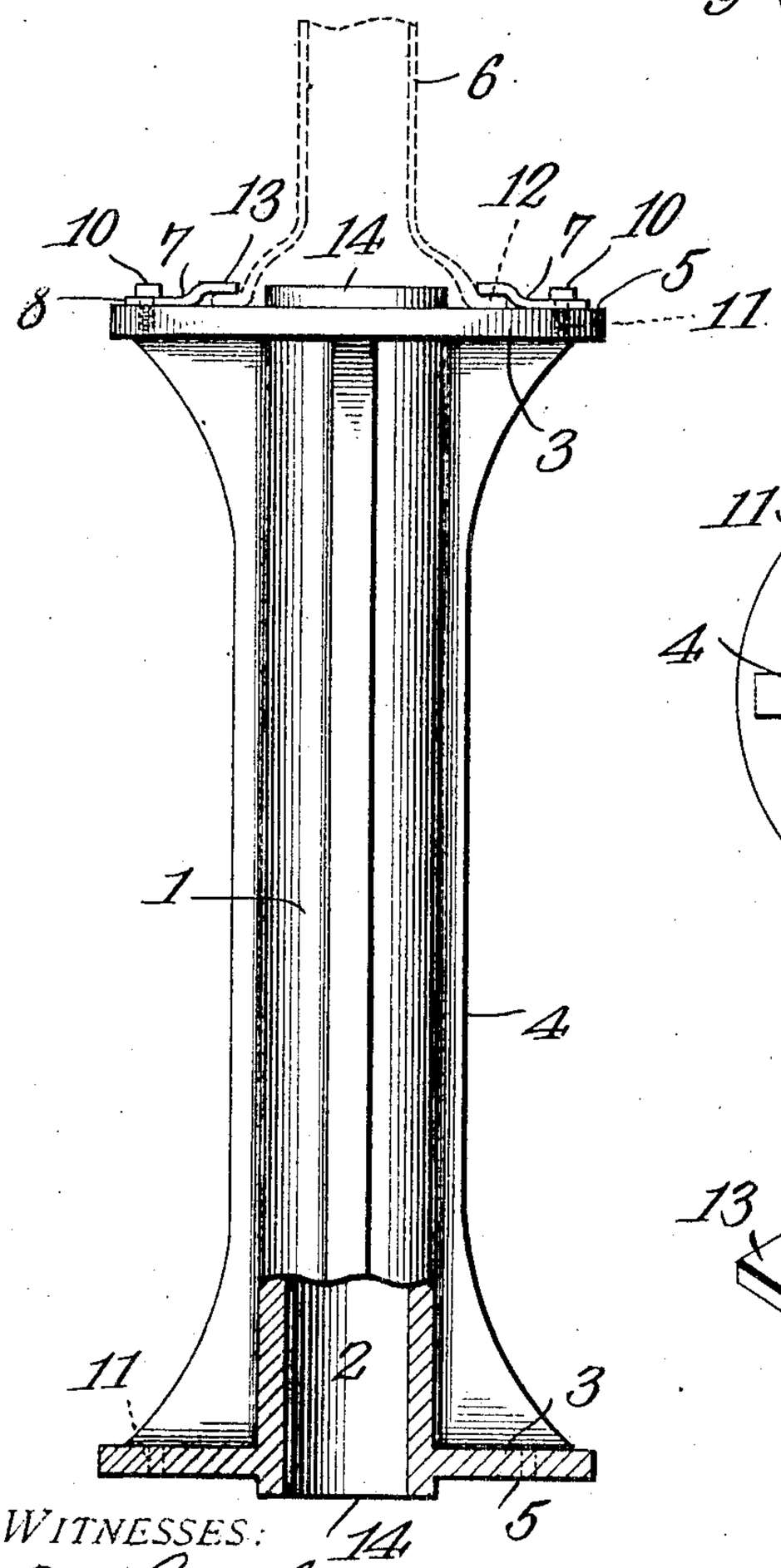


Fig. 2.

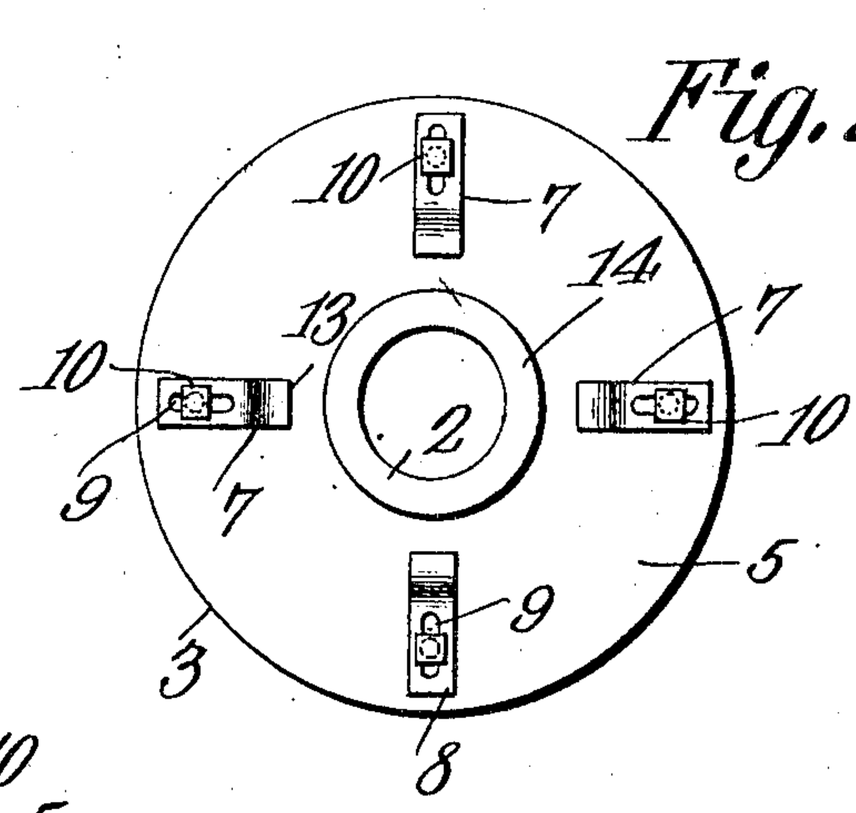


Fig. 3.

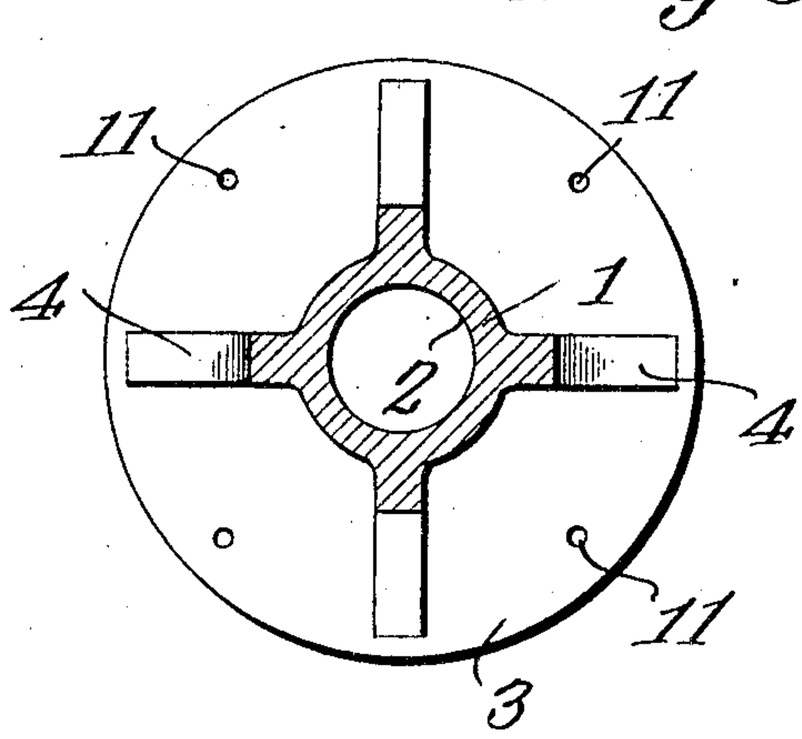
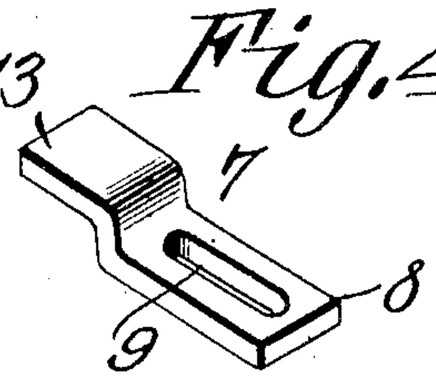


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN S. WEISER, OF SPRING VALLEY, WISCONSIN.

PUMP-SUPPORT.

No. 849,444. Specification of Letters Patent. Patented April 9, 1907.

Application filed October 31, 1906. Serial No. 341,435.

To all whom it may concern:

Be it known that I, JOHN S. WEISER, a citizen of the United States, residing at Spring Valley, in the county of Pierce and State of Wisconsin, have invented a new and useful Pump-Support, of which the following is a specification.

This invention relates to pumps for Artesian wells and the like; and it relates more particularly to a supporting-base for the pump which is in the nature of a protecting-sleeve in which the upper end of the well-casing is housed, so as to prevent breakage, corrosion, or rotting of the latter, whereby waste water, vermin, and other deleterious matter is positively excluded from the well.

The invention has for one of its objects to provide a device of this character which is of comparatively simple, inexpensive, and substantial construction, so designed as to be adapted for use in connection with various sizes and types of pumps and well-casings.

A further object of the invention is the provision of a cast-iron supporting-base and sleeve which is adapted to be buried in the earth at the upper end of the well-casing to protect the latter and form a rigid support on which the pump is removably mounted without the necessity of the usual wooden platform ordinarily employed in connection with pumps.

With these objects in view and others, as will appear as the nature of the invention is better understood, the invention comprises the various novel features of construction and arrangement of parts, which will be more fully described hereinafter, and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one of the embodiments of the invention, Figure 1 is a side elevation of the combined pump-support and protecting-sleeve, shown partly in section. Fig. 2 is a plan view thereof. Fig. 3 is a transverse sectional view. Fig. 4 is a perspective view of one of the clamps for fastening the bottom of the pump to the support.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

Referring to the drawings, 1 designates the tubular or cylindrical body of the support, which is open at its ends to receive within its bore 2 the well-casing or water-pipe. At the ends of the body 1 are transverse annular flanges 3 of substantial dimension, and extending longitudinally of the body 1 are reinforcing-ribs 4, that are integrally connected with the peripheral flanges 3 for strengthening the latter. The body 1 is preferably cast integral with the flanges and reinforcing-ribs, and the ends of the casting are similar, so that either can be arranged uppermost for receiving the bottom of the pump. The pump-support is sunk in the earth around the upper end of the pump pipe or casing. In burying the support the earth is firmly tamped around the tubular body 1 and between the flanges 3, so that the latter coöperate to prevent the casing from rotating or becoming deflected in the earth, so as to form a rigid and firm supporting structure or foundation for the pump.

The outer faces 5 of the flanges 3 are preferably smooth, so that a seal will be formed between the bottom of the pump and the top flange 3, on which the pump rests.

The pump is indicated at 6 and may be of any approved construction. It is secured to the support by means of a plurality of clamps 7, which are radially adjustable on the top flange 3, so as to adapt the support to pumps of various sizes and types. The base portion 8 of each clamp is provided with a longitudinal slot 9, through which extends a screw-bolt 10, that screws into a tapped opening 11 in the flange 3. The inner end of each clamp is offset from the base portion 8, so that the bottom flange 12 of the pump can be secured between said offset end 13 and the flange 3 of the pump-support. In the present instance four clamps are employed, which are disposed radially around the top flange 3 at ninety degrees apart. By means of these clamps the pump is rigidly secured to the support and is incapable of either vertical or lateral movement. By adjusting the clamps inwardly or outwardly pumps of different sizes may be employed. Hence the support is adapted for use with a large variety of commercial pumps.

At each end of the support is a vertically-extending cylindrical flange 14, that projects beyond the end face 5 so as to prevent the entrance of water or other liquid to the well-casing that might leak through between the bottom of the pump 6 and top flange 3.

From the foregoing description the advantages of the construction will be readily understood. The combined support and sleeve

affords an efficient protection at the most vital point of the pump-casing and effectively precludes any possibility of contamination entering the well. In addition to this the support being of rigid material and buried in the ground a firm foundation for the pump is provided, and also the necessity of having a wooden platform for supporting the pump is obviated.

I have described the principle of the invention, together with the device which I now consider to be the best embodiment thereof; but I desire to have it understood that the device shown is merely illustrative and that various changes may be made when desired as are within the scope of the invention.

What is claimed is—

1. A pump-stand and protecting-sleeve for well-casings comprising a hollow cylindrical body adapted to be buried in the earth at the upper end of the well-casing and having ribs thereon adapted to project into the surrounding earth, and means for clamping a pump directly thereto.

2. A combined pump-support and protecting-sleeve for well-casings comprising a hollow cylindrical body adapted to be buried in the earth at the upper end of the well-casing, a peripheral flange at the upper end of the body, reinforcing-ribs between the flange and body forming earth-engaging portions for preventing displacement of the support, and clamping devices on the said flange for securing a pump to the latter.

3. A combined pump-support and protecting-sleeve for well-casings comprising a hollow cylindrical body adapted to be buried in the earth at the upper end of the well-casing, peripheral flanges at the ends of the body having tapped openings, radially-adjustable clamps on the upper flange for securing pumps of different sizes directly to the said body, and bolts for adjustably securing the clamps to the top flange.

4. A combined pump-support and protecting-sleeve for well-casings comprising a hollow cylindrical body adapted to be buried in the earth at the upper end of the well-casing, a peripheral flange at one end of the body, a cylindrical flange rising from the top face of the peripheral flange and adapted to extend into the base of the pump for centering the latter relatively to the support, and radially-adjustable clamping devices on the peripheral flange for securing the pump thereto.

5. A combined pump-support and protecting-sleeve for well-casings comprising a hollow cylindrical body adapted to be buried in the earth at the upper end of the well-casing, peripheral flanges at the ends of the body for preventing vertical movement of the latter, longitudinally-extending ribs arranged to reinforce the flanges and coöperate with the surrounding earth to prevent rotary movement of the body in the earth, cylindrical flanges at the end of the body and projecting outwardly from the peripheral flanges for centering a pump thereon, and radially-adjustable clamping devices adapted to be used interchangeably on either of the peripheral flanges, each clamping device comprising a member having a longitudinally-slotted base and an offset inner end adapted to grip the bottom of a pump, and a bolt extending through the slot of the base and screwing into the adjacent peripheral flange.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN S. WEISER.

Witnesses:

FRANK R. JOHNSON,

OTTO LIEBENER.