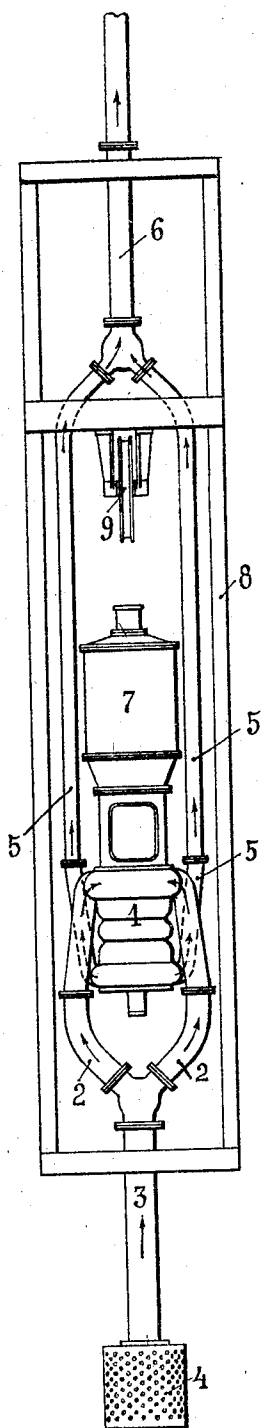


No. 796,489.

PATENTED AUG. 8, 1905.

P. ALBERTINE.
CENTRIFUGAL PUMP.
APPLICATION FILED SEPT. 23, 1903.



WITNESSES

Joh. F. Fischer
Wm. Meyer

INVENTOR

Peter Albertine

UNITED STATES PATENT OFFICE.

PETER ALBERTINE, OF WINTERTHUR, SWITZERLAND.

CENTRIFUGAL PUMP.

No. 796,489.

Specification of Letters Patent.

Patented Aug. 8, 1905.

Application filed September 23, 1903. Serial No. 174,342.

To all whom it may concern:

Be it known that I, PETER ALBERTINE, a citizen of the United States, residing at Winterthur, in the canton of Zurich, Switzerland, have invented certain new and useful Improvements in Centrifugal Pumps, of which the following is a specification.

My invention relates to that kind of pumps termed "sinking-pumps;" and the object of my invention is to provide such a pump which complies with all the requirements of a sinking-pump to the greatest possible extent, these requirements being comparatively small size and weight, simplicity of the power-supply, easy handling, all moving parts to be well protected against injury from without, steadiness and reliability in working, &c. I attain these objects by the adoption of a vertically-situated multiple centrifugal pump, mounted, together with an electric motor, in a frame or system of rods, the whole being so arranged that it can be lifted and sunk at will.

To attain certain advantages, I confine myself to that kind of multiple centrifugal pumps in which the liquid enters the pump at the top and is discharged at the lower part of the pump.

The figure in the accompanying drawing shows an elevation of a sinking-pump comprising my invention.

With reference to the drawing, which shows my invention, 1 is a multiple centrifugal pump; 2 2, its suction-nozzles, which are in this case divided and arranged symmetrically, so as to avoid uneven strains and, as later described, to eventually serve as frame. These suction-pipes unite to the common suction-pipe 3, preferably provided at its lower end with a check-valve and strainer 4. The discharge-nozzles 5 5, extending from the lower part of the pump, are also divided for the same reasons and unite at the top to the common delivery-pipe 6.

The shaft of the pump (not seen) is extended upward and driven by an electric motor 7, preferably dust and water proof, which is mounted directly over the pump. A frame 8, which may either be formed as a whole or as

a system of rods, connects the various parts, and the sides thereof also serve as guides when lifting and sinking the pump. The whole is preferably suspended by a roller 9. It is thus obvious that the frame may be of any shape and design. For instance, it might be composed of one solid frame or of a number of pieces and rods. The divided suction or delivery pipe, or both, may also serve as frame or supporting rods. In this case the frame referred to would be omitted.

As my invention relates to a pump specially for the purpose of sinking and draining shafts, the exterior structure supporting the whole and the selection of the multiple pump with suction-chamber at the top and motor directly coupled thereto are the essential features of my invention, and with reference to these I do not confine myself to the shape or design shown.

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

1. In a sinkable pump for shafts, the combination of a vertical multiple centrifugal pump, the suction-chamber of which is located above the pump-impellers, with a motor coupled to said pump, a frame or system of rods partly or wholly surrounding the pump and motor and means for lowering and lifting these parts as one unit, the suction or delivery pipe or both being branched, substantially as described.

2. In a sinkable pump for shafts the combination of a vertical multiple centrifugal pump the suction-chamber of which is located above the impellers, with a motor directly coupled to said pump and a frame or system of rods partly or wholly surrounding the pump and motor, the suction and delivery pipe being branched and arranged symmetrically to said pump substantially as described.

PETER ALBERTINE.

Witnesses:

JOH. FÜLSCHER,
CH. MANSUER.