(No Model.)

R. R. ROUSE.

VALVE COUPLING.

No. 349,321. Patented Sept. 21, 1886.

Fig. 3.

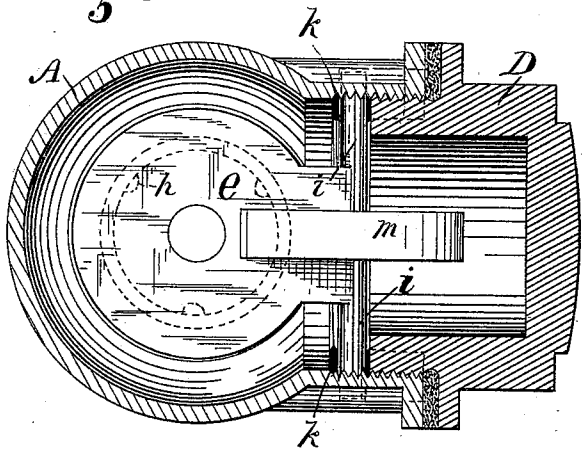


Fig. 1.

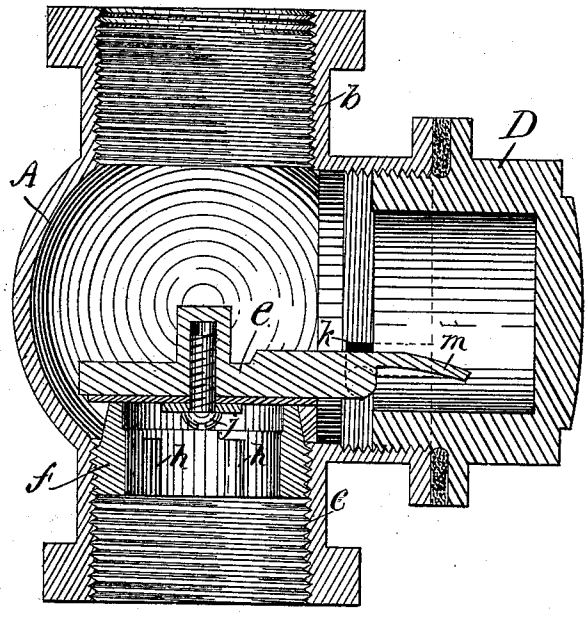
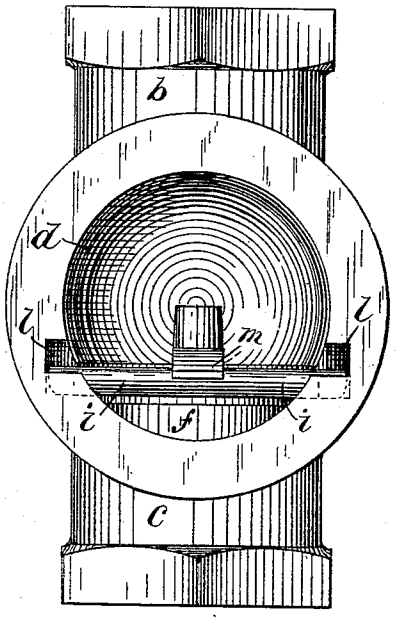


Fig. 2.



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UNITED STATES PATENT OFFICE.

ROSWELL R. ROUSE, OF INDIANAPOLIS, INDIANA.

VALVE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 349,321, dated September 21, 1886.

Application filed May 22, 1886. Serial No. 202,962. (No model.)

To all whom it may concern:

Be it known that I, ROSWELL R. ROUSE, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Valve-Couplings, of which the following is a specification.

My invention relates to an improvement in that class of valve-couplings in which a clack-valve is used as a check.

The objects of my improvement are to hinge the valve to the coupling in such a manner that the valve will adjust itself perfectly to its seat, whether the packing on its face be thick or thin, or be removed altogether; to provide for the removal of the valve and its seat without disconnecting the coupling from the pipe which it connects, and to provide a simple means for regulating the movement of the valve, all as hereinafter fully explained.

The accompanying drawings illustrate my invention.

Figure 1 is a vertical section. Fig. 2 is a side elevation with the cap removed. Fig. 3 is a transverse section.

The valve-chamber A is provided at opposite ends with screw-threaded extensions *b* and *c* to receive the pipe-connections. In one side of the valve-chamber is formed an opening, *d*, of sufficient diameter to allow the valve *e* to pass through it. The walls of said opening are screw-threaded, and the opening is closed by a screw-cap, D. The annular valve-seat *f* is screw-threaded on its exterior, and is provided with projections *h h* on its interior, by means of which, with a suitable spanner introduced through the opening *d*, it may be screwed from the inside of chamber A into the extension *b*, or removed therefrom. The valve consists of a flat disk, having attached to a short arm projecting from one edge thereof the short laterally-projecting pivots *i i*. The under face of the valve may be turned true, so as to fit the annular seat *f*; or a suitable packing—as a disk of rubber or leather—may be secured thereto by means of the screw *j*. The ends of the pivots *i i* rest in recesses *k k*, forming bearings in the walls of the opening *d*. The height of said recesses is nearly twice the diameter of the pivots, and their width is such as to fit the pivots loosely, so that the pivoted edge of the valve, when in position, may be free to have a slight vertical movement. The purpose of such a construction of the pivot-bearings is to allow the valve to adjust itself to its seat perfectly as the packing wears, and thus overcome the difficulties heretofore arising in this class of valves by reason of the fixed relation of the pivot and the heel of the valve to the valve-seat. The walls of opening *d* are grooved on each side at *l l*, so that when cap D is removed the valve-pivots may pass from the outside to the bearings *k*, and the cap when screwed on holds the pivots in place.

For the purpose of regulating the extent of the swinging movement of the valve, an arm projects backward from the top of the valve beyond the pivots *i i*, so as to come in contact with the inside of cap D. If a short quick movement of the valve is desired, said arm is bent downward, as shown in Fig. 1.

By unscrewing cap D the valve and the valve-seat may be removed and refitted without disturbing the rest of the coupling.

I claim as my invention—

In a valve-coupling, the combination of the valve-chamber having opening *d*, the cap for closing said opening, a valve-seat in said chamber, the clack-valve having pivots *i i*, and bearings for said pivots formed in the walls of said opening, said bearings being elongated vertically so as to permit a vertical movement of the pivots therein, substantially as specified.

ROSWELL R. ROUSE.

Witnesses:
J. E. SANDERS,
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