J. B. Hudson. Automatic Rain Conductor

72298 PATENTED

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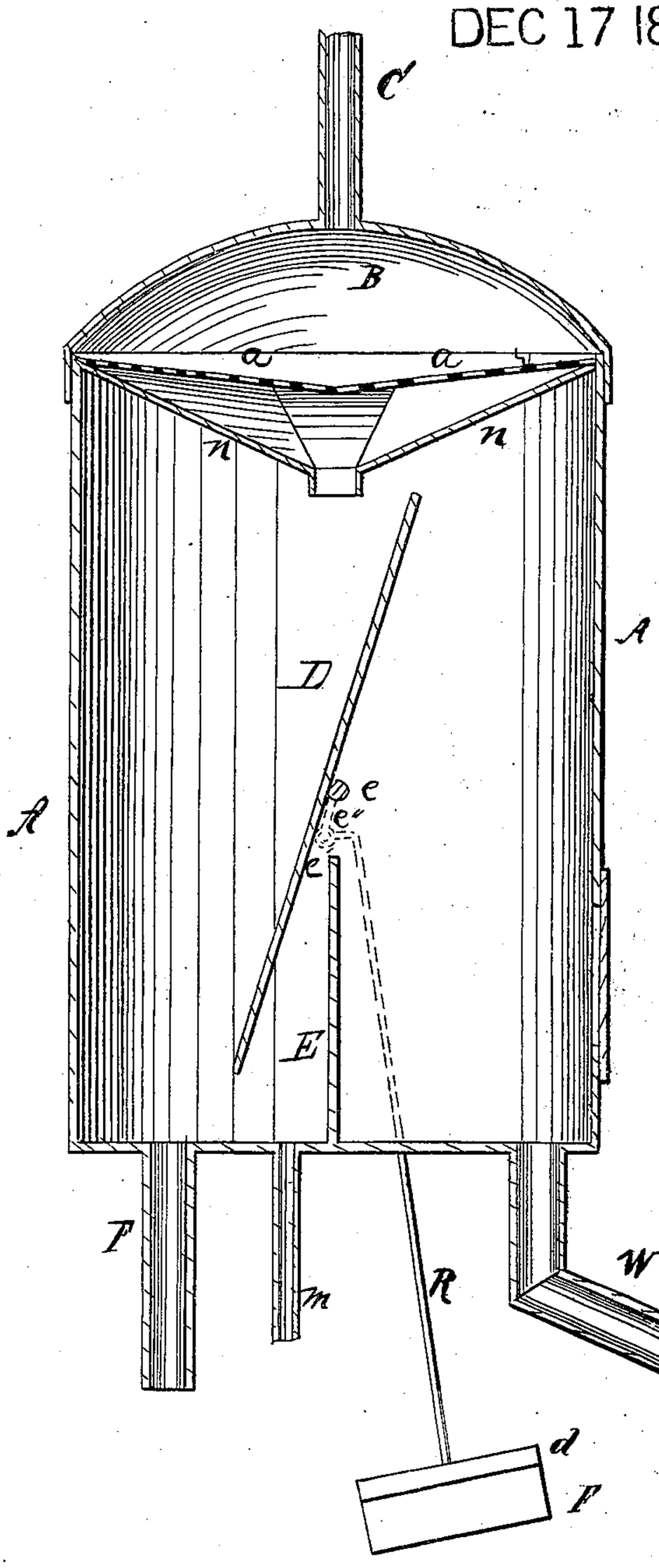

Witnesses.
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JAMES B. HUDSON, OF FAYETTEVILLE, PENNSYLVANIA.

Letters Patent No. 72,298 *dated December* 17, 1867.

IMPROVED AUTOMATIC RAIN-CONDUCTOR.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES B. HUDSON, of Fayetteville, in the county of Franklin, and State of Pennsylvania, have invented a new and improved Automatic Rain-Conductor; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a vertical section through the rain-conductor.

This invention relates to an apparatus for conducting water into cisterns or tanks, and having its conducting disk to oscillate on pivots, and connected with a float whereby the said disk is made to reverse its angle of inclination and deliver the water into a waste-pipe when the water in the cistern reaches a certain point.

A is a drum, cylinder, or chamber of any suitable shape. B is a removable top or cover fitted on the drum, as shown. C is a pipe opening into the cover, and is to be connected with the trough or pipe bringing the water from the roof or elsewhere. *a a* are a perforated plate or strainer for straining the water before it enters the cistern. *n n* are hopper, gathering the water to an orifice, *r*. D is a reversible disk pivoted at *e* in the sides of the drum A, as shown. R is a rod operating the said disk by means of its connection thereto. The dotted arm *e''* is outside the drum, and attached to the pivot-shaft *e*. The rod R connects with this arm by a pivot-joint, *e'*, as shown in dotted lines. E is a partition or diaphragm for preventing the escape of the water through both pipes P and W at once. P is the pipe delivering the water into the cistern. W is the pipe delivering the water elsewhere when the cistern has been filled to a certain point. F is a float formed of a block of cork, or other suitable material, acting as a float. *d* is the backing by which the cork is secured to the rod R. *m* is a tube, to be hereinafter described. When in use, the drum is fixed securely in such a position above the cistern or tank that the float F will rest on the surface of the water when the latter rises to a certain point near the top of the cistern. The pipe C is connected with the leading pipe from the roof or elsewhere, and the pipe W is connected with the waste-water trough or pipe. The pipe P connects with the cistern. When the float F is suspended by the rod R, the disk D is held in the position shown in drawing, and the water entering at C passes down through *r*, and is conducted into the cistern through the pipe P, as shown. When the cistern has filled, so that the water-level raises the float F, thus reversing the position of the disk D, as shown by the red lines, the water is then conducted off through the waste-pipe W. The rod R can be attached to the disk-shaft *e* within the drum, if desired, and this perhaps would be a better way. The tube *m* then would serve as a guide for the rod, which would be attached directly to the under side of the disk at the same distance from the pivot-shaft *e* that the arm *e''* now holds it.

In those localities where the inhabitants are forced, from lack of springs, to use rain-water caught in cisterns, this invention will be found of great utility, as the means heretofore employed for conducting the rain to cisterns consists of a temporarily attached funnel or trough, which requires to be taken off when the cistern is filled, and when its removal is neglected, as is frequently the case, the cistern is overflowed and more or less injured, and sometimes entirely destroyed. When the cistern is provided with a discharge-pipe near its top, this pipe affords an ingress for vermin and insects (which renders the water unfit for use) and often turns the cistern into a rat-trap. This pipe also is liable to become choked up, and thus cause the overflow of the water. The temporary funnels or troughs become shattered and destroyed by the elements, necessitating their frequent repair or renewal, besides requiring to be removed oftentimes in the midst of a storm. The strainer *a a* serves to retain any extraneous particles of matter from the roof or elsewhere which would otherwise pass into the cistern, and deposit an injurious sediment or debris at the bottom of the same. It can be readily taken out for cleaning by removing the cover B, as it is made to rest loosely within the hopper *n*.

My invention obviates all the above-stated disadvantages, and is, from its simplicity, small cost, and effective operation, a desideratum long felt in the localities before mentioned.

What I claim as new, and desire to secure by Letters Patent, is—

The cylinder A, having a removable cover, B, and provided with a hopper, *n*, strainer *a*, partition E, pivoted disk D, operated by float F and rod R, and pipes C, P, *m*, and W, all constructed, arranged, and operating substantially as and for the purpose described.

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Witnesses:

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