H. Gerred,

Cattle Pump.

No. 22,640. Patented Jan. 18, 1859.

Fig. 2.

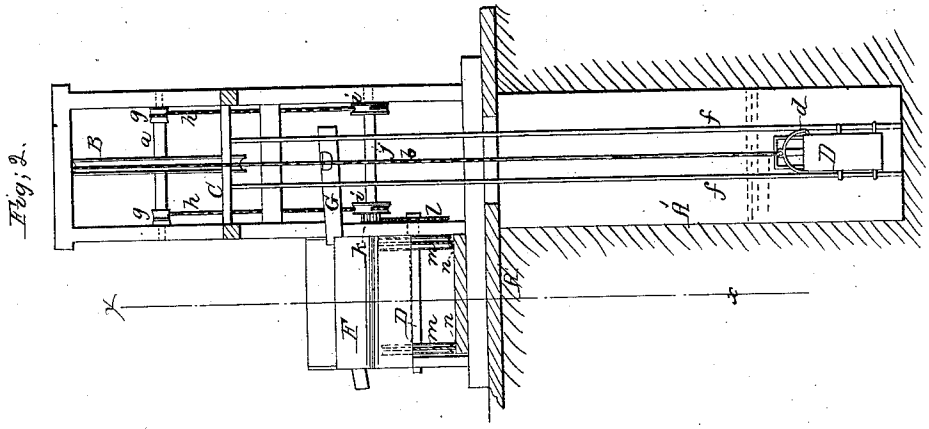


Fig. 3.

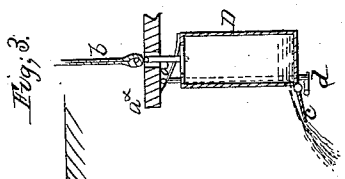
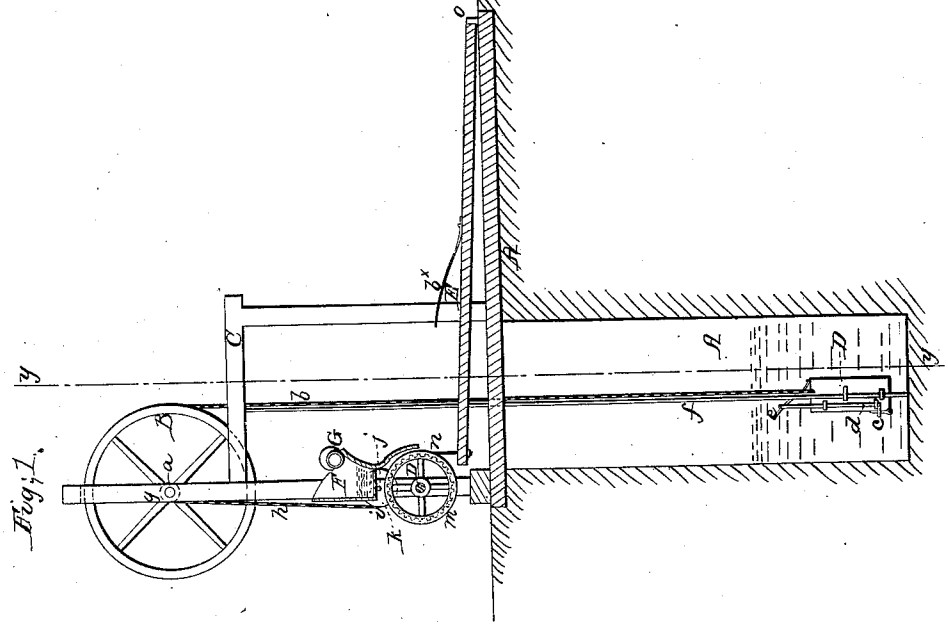


Fig. 1.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HUGH GERRED, OF SPARTA, ILLINOIS.

CATTLE-PUMP.

Specification of Letters Patent No. 22,640, dated January 18, 1859.

To all whom it may concern:

Be it known that I, HUGH GERRED, of Sparta, in the county of Randolph and State of Illinois, have invented a new and Improved Automatic or Self-Acting Water-Elevating Device; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical section of my invention taken in the line *x*, *x*, Fig. 2. Fig. 2, is also a vertical section of ditto, taken in the line *y*, *y*, Fig. 1. Fig. 3, is a detached sectional view of the bucket.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a peculiar arrangement of gearing for connecting a treadle or platform with a lifting pulley as hereinafter fully shown and described, whereby animals in treading on the platform in quest of drink will, by slightly depressing said platform, raise water from the well to which the device is applied.

The invention is designed to effect the desired end with a small vibration or movement of the platform, and obviate the difficulty, to wit, a long vibration or movement of the platform attending other devices for a like purpose.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents a base or platform which is placed over a reservoir, or well A′, from which water is to be drawn, and B, is a pulley which is placed on a shaft *a*, in the upper part of a framing C, attached to platform A. The pulley B, has a chain or rope *b*, attached to its periphery, and a bucket D, is attached to the end of the rope or chain, said bucket being provided with a valve *c*, at its lower end, which valve is retained or kept in a closed state by a slide clasp *d*, the upper end of which extends above the top of the bucket and is kept in place by a spring *e*, see more particularly Figs. 1 and 3. The bucket D, is fitted and allowed to slide readily on vertical guides *f*, *f*, which extend down to the bottom of the well A′.

On each end of the shaft *a*, a small pulley *g*, is placed, around which chains *h*, *h*, are wound, one on each, and the lower ends of these chains are wound on pulleys *i*, *i*, on each end of a shaft *j*, at the lower part of the framing C, and in the same plane with the shaft *a*. On one end of the shaft *j*, a pinion *k*, is placed, and into this pinion a spur wheel *l*, gears. The wheel *l*, is placed at one end of a shaft D, which is placed in the framing C, and has two grooved pulleys *m*, *m*, placed on it to which pulleys cords or chains *n*, *n*, are attached, one to each. These cords or chains are also attached to the end of a platform E, the opposite end of the platform being connected by a hinge or joint *o*, to the base or platform A. The platform E, is placed directly before a trough F, and a spout G, communicates therewith.

The proportion or relative size of the pulleys *m*, *m*, wheel *l*, pinion *k*, pulleys *i*, *i*, *g*, *g*, and B, is such that the bucket D, will rise 36 feet when the platform E, is depressed 4 inches—at least this would be about the proper rate of movement to give the platform and bucket, for the device could then be applied to wells of ordinary depths and answer in all cases a good practical purpose.

It will be seen that when an animal passes on the platform E, toward the trough F, it will be depressed and the bucket D, raised. The water being discharged when it reaches the end of its upward movement in consequence of the clasp *d*, striking against a crosspiece $a^{\times}$ in the framing C, and liberating the valve *c*, which opens and thereby allows the water to pass into the spout G, by which it is conveyed into the trough F. When the animal leaves the platform E, the bucket descends by its own gravity to the bottom of the well, the platform E, rising. A spring $b^{\times}$, attached to the platform serves to prevent any unequal movement or sudden jerks and acts in a manner as a counterpoise to the bucket.

I do not claim broadly a valvular bucket attached by a pulley to a platform, irrespective of the arrangement of the parts herein shown and described, for such device has been previously used and may be seen in

the device of Jared Ayres, patented April 1856; but,

I do claim as new and desire to secure by Letters Patent,

The arrangement and combination of the guides (*f*), bucket D, [the latter having a valve (*c*) clasp (*d*) and spring (*e*)] the trough F, platform E, and wheels (*m*, *l*, *i*, *g*), as and for the purposes herein shown and described.

HUGH GERRED.

Witnesses:
L. A. WILSON,
T. R. GOLDEN.