

UNITED STATES PATENT OFFICE.

HARVEY W. SABIN, OF REEDS CORNERS, NEW YORK.

APPARATUS FOR DRAWING WATER FROM WELLS.

Specification of Letters Patent No. 6,946, dated December 11, 1849.

To all whom it may concern:

Be it known that I, HARVEY W. SABIN, of Reeds Corners, in the county of Ontario and State of New York, have invented a new and Improved Apparatus for Drawing Water from Wells, &c.; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view of the apparatus, Fig. 2, a side elevation thereof, Figs. 3 and 4 perspective views of parts of the same detached, and Fig. 5 a vertical section of one of the buckets.

Similar letters indicate like parts in all the figures.

My water drawing apparatus is mounted upon a suitable frame work M, N—or platform—placed upon the top of a well or cistern, and is constructed as follows. To the standard K,—rising from the frame work M, N,—I firmly secure the circular platform B; and on the platform B, is placed the rotating disk A—working on a journal formed at the upper end of the standard K, which passes through an aperture in its center. Standards E, E', rise from the disk A, which support the requisite movements for drawing water from a well or cistern, and lowering an empty bucket into the same. Grooves *o*, *p*, are formed in the face of the platform B, as represented in Fig. 3;—one end of which grooves terminate abruptly, and the other incline gradually to the face of the platform. Ears *r*, *t*, rise at the side of B, at the distance of one fourth its periphery from each other, in which are formed notches *s*, *v*; at one side of which notches, the ears descend abruptly and on the other incline gradually to the face of the platform. The rotating disk A, rests upon the flanch *a*, descending from its periphery; the inner extremities of the cranks *w*, *x*, are jointed to the under side of A, and have free play in notches in the flanch *a*. The shaft *k*, on which is placed the elevating wheel C, and the ratchet wheel D, has its bearings in the standards E, E'.

F, F', are arms projecting from opposite sides of the standard E, to the extremities of which the pawls H, H', are jointed that act upon the ratchet wheel D. Just below the arms F, F', the bar G, is secured to the inner sides of the standard E; immediately below the pawls H, H', the vertical rods

i, *j*, descend through holes in the bar G, and the disk A, and rest upon the platform B. When the lower ends of the rods *i*, *j*, rest upon the face of the platform B, their upper ends press against the under sides of the pawls H, H', and elevate them from the ratchet wheel D; and when the lower ends of these rods drop into the grooves *o*, *p*, formed in the platform, they allow the pawls to act upon the ratchet wheel. The disk A, can only be turned from left to right, for the reason that the cranks *w*, *x*, will strike against the abrupt side of the ears *r*, *t*, (rising from the platform B,) when an attempt is made to move the disk in an opposite direction. When the disk A, is moved on its axis one of the cranks *w*, *x*, will pass up the inclined side of the ear *r*, and drop into the notch *s*, which will securely retain the drawing apparatus in a proper position for drawing a full bucket at one end of the rope *c*, out of the well, and to let the empty bucket at its opposite end into the same; when the crank *w*, or *x*, is caught in the notch *s*, in the ear *r*, one of the vertical rods *i*, *j*, falls into one of the grooves *o*, *p*, in the upper side of the platform B; which allows the one of the pawls H, H', that is at the left of the operator, to fall upon the ratchet wheel D, which plays thereupon as the full bucket is elevated in the well, and prevents any reverse action of the main shaft, should the operator desire to rest himself during the operation. When the full bucket is elevated so high as to strike against the crank *w*, or *x*, it elevates the crank out of the retaining notch *s*, thereby enabling the operator to turn the disk to the right, till the crank *w*, or *x*, is caught and retained in the notch *v*, in the ear *t*, at which moment the rod *i* or *j*, as its lower end is carried up the inclined end of the groove *o*, or *p*, on to the face of the platform B, raises the pawl H, or H', from the wheel D, and allows the full bucket J, to descend into the basin L. When the bucket descends into the basin L, the valve *y*, in its bottom will be opened by the pin *z*, projecting therefrom, striking against the bottom of L. The water is discharged from L, through the spout *m*, into a receiving bucket. As soon as the bucket J, has discharged its contents, the main shaft *k*, is reversed until the bucket strikes against the crank *w*, or *x*, (as the case may be) and lifts it out of the retaining notch *v*, when the disk A, is turned until

the opposite crank *w*, or *x*, is brought into, the retaining notch *s*, in the ear *r*; as soon as it is brought into this position one of the rods *i*, or *j*, will fall into one of the grooves
5 *o*, or *p*, in the platform B, and allow the pawl H, or H', at the left of the operating crank *l*, or *l'*, to fall onto the wheel D; when the full bucket at the opposite end of the
10 rope *c*, will be elevated by turning the main shaft, and be discharged of its contents in the manner above set forth.

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

The mounting of the respective parts of
15 the drawing apparatus upon the rotating

disk A, when the said disk is placed upon and supported by the circular platform B, which has the grooves *o*, *p*, formed in its face and the notched ears *r*, *t* rising from its periphery, that are combined and operate
20 with the drawing apparatus substantially in the manner and for the purpose as herein represented and described.

The above specification signed this fifth day of September 1849.

HARVEY W. SABIN.

Witnesses:

E. P. GODDARD,
GEORGE ROGERS.