S. D. TUTTLE.

Improvement in Door and Gate Springs.

No. 131,914. Patented Oct. 1, 1872.

FIG. 1.

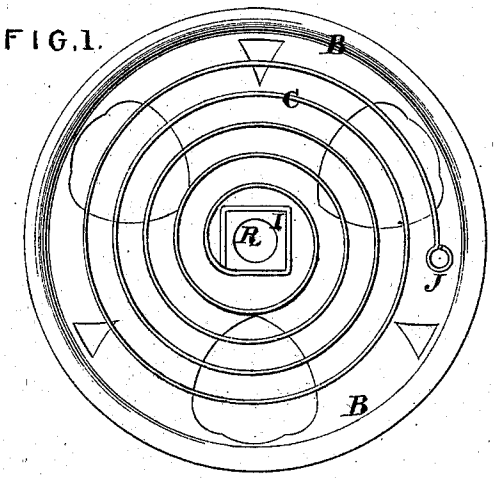


FIG. 2.

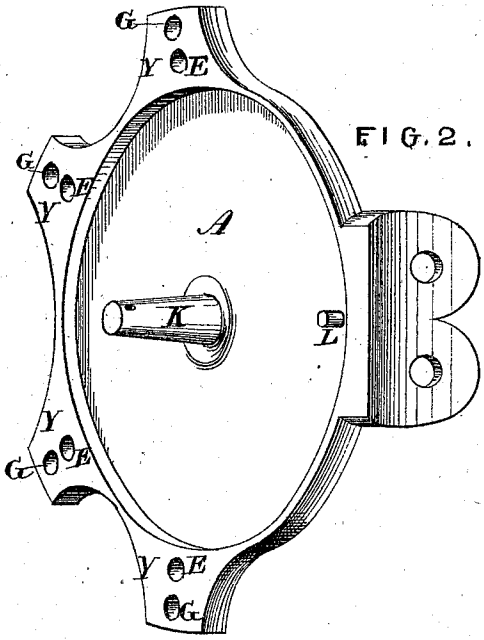


FIG. 5.



FIG. 4.

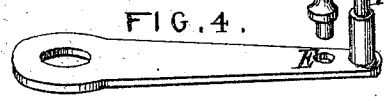


FIG. 3.

Witnesses

Jas. L. Ewin

Walter Allen

Inventor.

Sterling D. Tuttle

By Knights Bros

Attorneys

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

STERLING D. TUTTLE, OF EATON, OHIO, ASSIGNOR TO HIMSELF, W. W. AKER, AND ISAAC N. WELSH, OF SAME PLACE.

IMPROVEMENT IN DOOR AND GATE SPRINGS.

Specification forming part of Letters Patent No. **131,914**, dated October 1, 1872.

To all whom it may concern:

Be it known that I, STERLING D. TUTTLE, of Eaton, county of Preble and State of Ohio, have invented certain Improvements in Door and Gate Springs, of which the following is a specification:

My invention relates to the construction of door and gate springs wherein a stationary disk or plate is attached to the facing of the door or to the posts of gates, as the case may be, said stationary plate having a central stud upon which a movable plate or disk revolves, said movable plate carrying a coiled spring, and having a groove around its periphery, to which a cord is attached, the opposite end of the cord being attached to the door or gate; and consists in the combination of the two concentric plates to which the ends of the spring are attached, and an adjustable guide-arm for the cord, as hereinafter described.

Figure 1 is a plan view of the revolving plate or disk B with its square projections I, to which the spring C is attached. Fig. 2 is a perspective view of the stationary plate or disk with the studs K L, and the lugs or projections Y, attached. Fig. 3 is a sectional view, showing the manner of attaching the machine to a fluted post or column of any kind—cast-iron, stone, or wood. Fig. 4 is a view of the arm which supports Fig. 5 in place. Fig. 5 is a view of a small channel-pulley over which a cord passes.

A is the top or stationary plate or disk, which is fastened to the facing of the door, or post, or other position, when applied to gates. This stationary plate A has a stud, K, attached to its center; also a stud, L, to which the loop J on the outer end of the spring C is attached. The revolving plate B, which incloses and carries the spring C, has a hole, R, in its center, and through the square stud or projection I, to which the spring is attached. The plate B has a groove around its periphery to which a cord is attached, the opposite end of the cord being attached to the door or gate. This plate B, carrying the spring and cord, is placed on the plate A, the stud K passing through the hole R on plate B sufficiently far to receive the arm D on the outside of the plate B. The hole N in the large end of the arm D fits onto the end of the stud K outside the plate B, the arm being held in place by means of a pin passing through the outer end of the stud K. The pivot F on the small or outer end of the arm D fits into the hole G in the outer ends of the lugs Y on plate A. The small channeled pulley shown in Fig. 5 fits into the hole E in arm D and lugs Y. The cord passing over the channel O of the pulley, and between it and the stud or arm S of arm D, prevents the cord from being thrown off from the groove in the periphery of the plate B. The arm D and pulley O may be adjusted to suit any situation to which the machine may be attached.

Fig. 3 shows the manner of attaching the machine to a fluted or any other shaped post made of cast-iron or stone, such as are frequently used for gate-posts. The machine is secured to a block, P, which is fluted to fit the post or other thing to which it may be attached, the block P being held to the post H by means of a wire lashed around the block and post, as shown in Fig. 3.

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

The plate A, constructed with the studs K L, and series of perforations E G, in combination with the plate B, spring C, adjustable arm D F, and roller O, all arranged to operate substantially as and for the purposes set forth.

STERLING D. TUTTLE.

Witnesses:

F. B. HUNT,

OLIVER GEST.