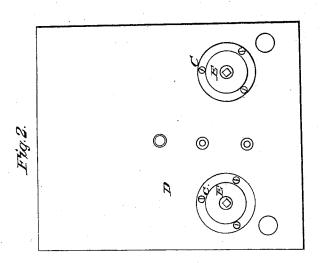
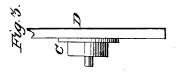
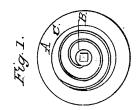
No. 723.

Patented May 4, 1838.







## UNITED STATES PATENT OFFICE.

JOSEPH S. IVES, OF NEW YORK, N. Y.

MODE OF APPLYING SPRINGS TO CLOCKS.

Specification of Letters Patent No. 723, dated May 4, 1838.

To all whom it may concern:

Be it known that I, Joseph S. Ives, of the city, county, and State of New York, have invented a new and useful Improvement in the Method of Applying Coiled Metal Springs to House-Clocks, of which the following is a full and exact description.

The nature of my invention consists in applying the springs A, Figure 1, to the barrel arbors B on the outside of the front plate D, Figs. 2 and 3, of the clock, instead of placing them on the inside of the clock, or between the plates as in the usual method. This I do by making a small cylinder shaped block B, Fig. 1, of the same length as the width of the spring, with a square hole through the center of it lengthwise, the same size as the square of the arbor E to which it is to be applied. This block which I term the arbor collet, has a hook or catch on the outside of it which attaches to the inside end of the spring in the usual manner. This collet being placed on the arbor close

to the plate, the box c containing the spring, and made in the usual manner, is placed directly over the arbor collet; the arbor projecting through a hole in the center of the box of sufficient length for the purpose of winding up the clock, the box is then fastened to the clock plate by means of screws 30 through a rim on the outside of the box, or may be fastened in various other ways. By this method springs can be applied to any common clocks made to run with weights, without making any alteration in them or 35 taking them in pieces.

What I claim as my invention and desire

to secure by Letters Patent, is—

The application of coiled metal springs in the manner described, to the outside of 40 the front plate of the clock.

JOSEPH S. IVES.

Witnesses:

RICHD. NIXON, DOROTHEA NIXON.