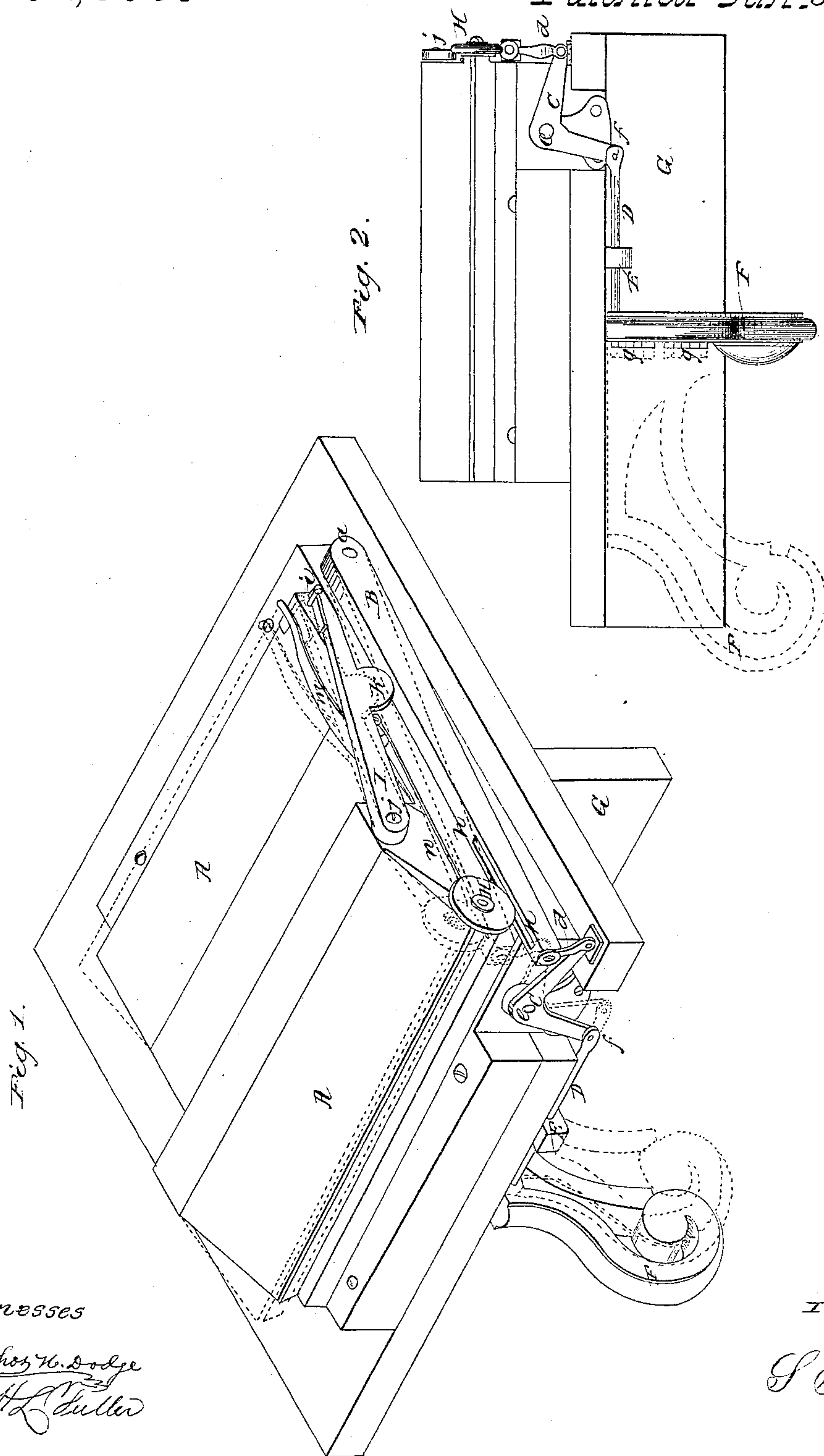


S. Taylor,

Knee-Swell for Organs, &c.

N^o 52,339.

Patented Jan. 30, 1866.



Witnesses

Thos H. Dodge
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S. TAYLOR, OF WORCESTER, MASSACHUSETTS.

KNEE-SWELL FOR ORGANS AND MELODEONS.

Specification forming part of Letters Patent No. 52,339, dated January 30, 1866.

To all whom it may concern:

Be it known that I, S. TAYLOR, of the city and county of Worcester, in the State of Massachusetts, have invented certain new and useful Improvements in Knee-Swells for Organs and Melodeons; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents so much of a knee-swell for an organ and melodeon as is necessary to illustrate my invention, and Fig. 2 represents a front view of Fig. 1.

In the drawings, A A represent swell-valves similar to those in common use. These swell-valves are represented closed in black lines, and open in red lines, Fig. 1.

B represents a lever, the rear of which is hinged or pivoted at *a*, while its front end is connected to the crank or bell lever C by the pivoted connecting-rod *d*. The crank or bell lever C turns on a pivot or journal, *e*, and its lower end is pivoted at *f* to the sliding arm D, which is supported by and slides in the bracket E.

F is the knee-lever, which is hinged to the frame-piece G, as seen at *g*, under the action, so that when not in use it can be turned back out of the way under the action, as indicated in red lines, Fig. 2, of the accompanying drawings. The front swell-valve has a friction-roller, H, which rests in a groove, *h*, in the front end of lever B, while the rear swell-valve has a projecting piece, *i*, which rests upon the end of lever I, which is pivoted at *j*. Lever I has a cam-piece, *k*, which bears upon the top of lever B. The rear swell-valve is held down by a spring, *m*, and the front valve is held down by spring *n*.

The swell-valves are operated as follows: When the knee-lever is moved or pressed toward the sliding arm D the latter is pushed back, which causes the upper end of crank-lever

C to rise up, thereby elevating the front end of lever B, together with the friction-roll H, which rolls in the groove *h*. As lever B is elevated it elevates, in turn, lever I by pressing against the cam-piece *k*, whereby it will be seen that both swell-valves are opened in an expeditious manner without being so connected with each other as to cause any cramping or twisting in their operation. It will be seen that the knee-lever F is not connected permanently with the mechanism which operates the swell-valves, and consequently can be turned back out of the way under the instrument in an instant. By this arrangement and construction of the parts the knee-lever can be brought out so that the performer can operate the swell without that twisting of the body and limbs which is necessary in order to operate the knee-levers heretofore in use, which have been attached to the mechanism which operates the swell-valves, and consequently do not project out in front of the instrument sufficiently far to enable the performer to work the same without, as before stated, a great deal of twisting of the body and limbs.

It will therefore be seen that by my improvement the performer, when seated at the instrument, can turn or swing out the knee-lever, which can then be operated by a simple lateral motion of the limb, while, when the playing is stopped, the knee-lever can be quickly turned or swung back under the action of the instrument, where it is out of the way.

Having described my improvements in knee-swells for organs and melodeons, what I claim as of my invention, and desire to secure by Letters Patent, is—

The combination, with the front of an organ or melodeon, of a hinged knee-lever for operating the swell, substantially as set forth.

S. TAYLOR.

Witnesses:

THOS. H. DODGE,
H. L. FULLER.