

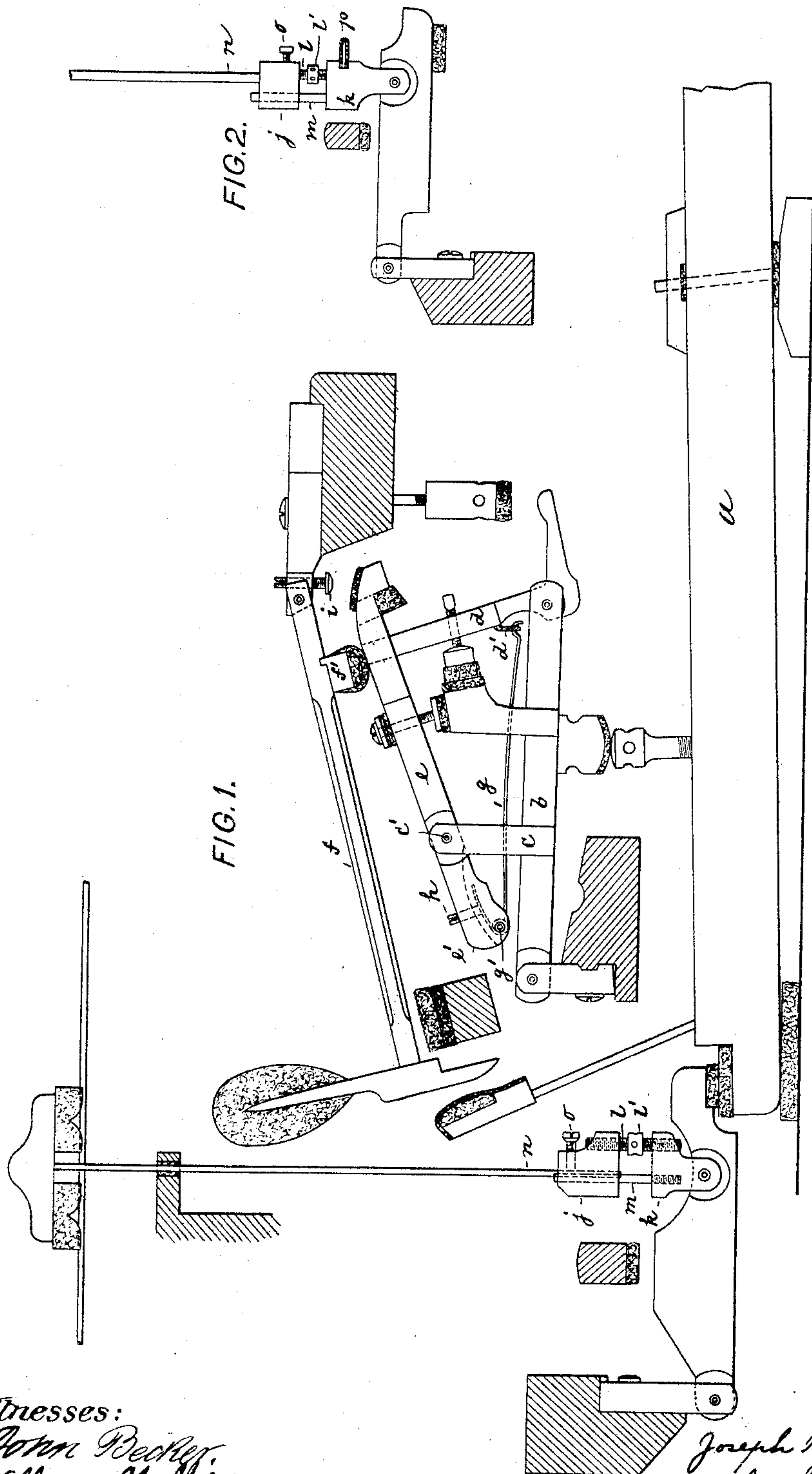
No. 629,362.

Patented July 25, 1899.

J. HERRBURGER.
GRAND PIANO ACTION.

(Application filed May 6, 1899.)

(No Model.)



Witnesses:

John Becker
William Miller.

Inventor:

Joseph Herrburger
by his attorneys
Roeder & Brien

UNITED STATES PATENT OFFICE.

JOSEPH HERRBURGER, OF PARIS, FRANCE.

GRAND-PIANO ACTION.

SPECIFICATION forming part of Letters Patent No. 629,362, dated July 25, 1899.

Application filed May 6, 1899. Serial No. 715,781. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HERRBURGER, a citizen of France, and a resident of Paris, France, have invented certain new and useful
5 Improvements in Grand-Piano Actions, of which the following is a specification.

This invention relates to an improved action for grand pianos, and more particularly to novel means for quickly returning the jack
10 beneath the knuckle of the hammer-shank and novel means for regulating the position of the dampers upon the wires.

In the accompanying drawings, Figure 1 represents a side elevation, partly in section, of
15 my improved grand-piano action; and Fig. 2 represents a modification of the damper-block.

The letter *a* represents the key of a grand action. *b* is the rider; *c*, the rider-flange; *d*, the jack; *e*, the repeating-lever, and *f* the
20 hammer-shank, having knuckle *f'*. To the lower or rear end *e'* of the lever *e* there is secured back of fulcrum *c'* a bent spring *g*, embracing a pin *g'* and engaging with its lower shank a loop *d'* of jack *d*, while its upper shank
25 is engaged by a regulating-screw *h*.

The pin *g'* is placed at such a distance from the fulcrum *c'* that when the upper end of lever *e* strikes the screw *i* the lower end of the lever in rising will draw the spring upward
30 to increase its tension at the exact moment when the entire force of the spring is required to return the jack beneath the knuckle *f'*. In this way a quick return of the jack is insured.

The damper-block is made in two sections *j* and *k*, engaged by right-and-left screw *l*, having a head *l'*, provided with spanner-holes. 35 A wire rod *m*, screwed into the lower section *k* and passing loosely through the upper section *j*, serves as a guide for the latter. The damper-wire *n*, carrying the damper-head, is 40 attached to the upper section *j* by a screw *o*. If the screw *l* is turned by means of a key, the upper section *j* will be either raised or lowered to raise or lower the damper-head. If desired, the damper-block may be provided with a 45 third pedal-shoulder *p*, Fig. 2.

What I claim is—

1. In a grand-piano action, the combination of a repeating-lever and jack with a spring secured to the rear end of the repeating-lever, 50 back of its fulcrum, and connected to the jack, all being so constructed that the tension of the spring is increased as the rear end of the repeating-lever is swung upward, substantially as specified. 55

2. In a grand-piano action, the combination of a sectional damper-block, with a right-and-left screw engaging the block-sections, and means for guiding the upper block-section, 60 substantially as specified.

Signed by me, at Paris, France, this 24th day of April, 1899.

JOSEPH HERRBURGER.

Witnesses:

AUGUSTE WYLE,
ANTOINE GERVAIS.