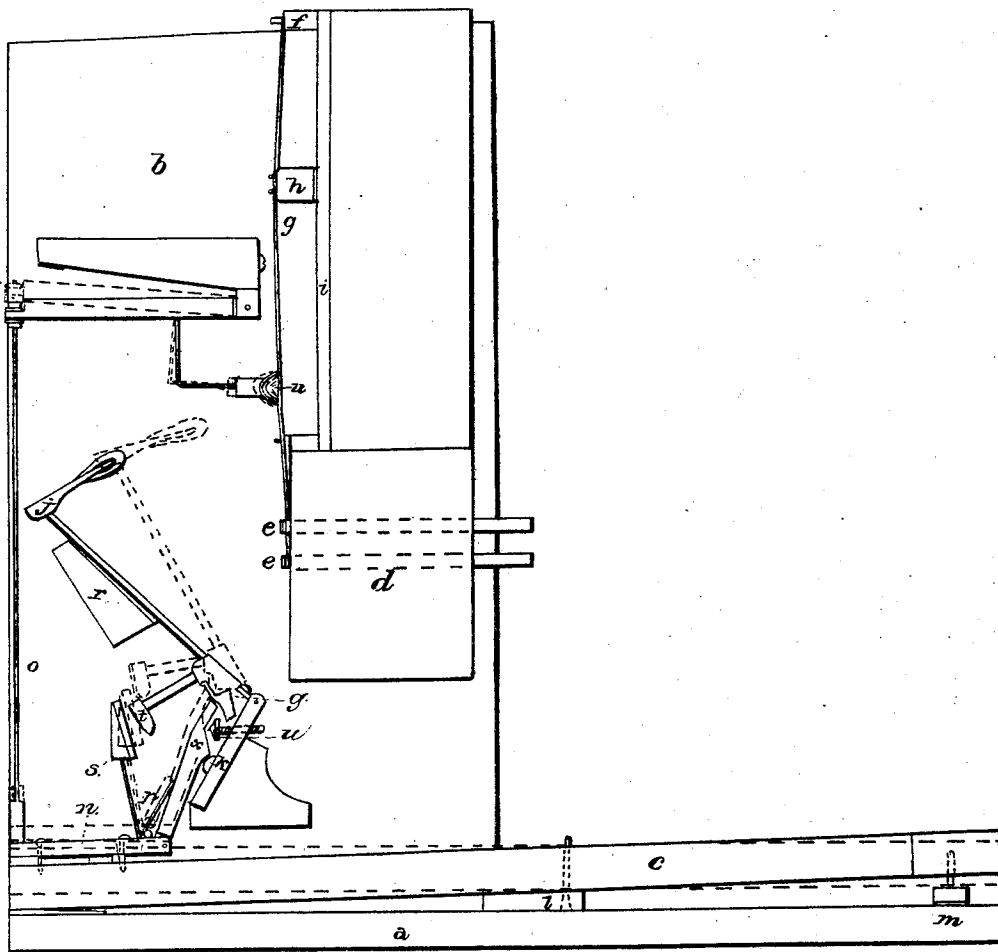


G. Traeysse,

Piano Action,

N^o 9,640.

Patented Mar. 29, 1853.



UNITED STATES PATENT OFFICE.

GEO. TRAEYSER, OF CINCINNATI, OHIO.

VERTICAL PIANO.

Specification of Letters Patent No. 9,640, dated March 29, 1853.

To all whom it may concern:

Be it known that I, GEORGE TRAEYSER, of Cincinnati, in the county of Hamilton and State of Ohio, have invented new and
5 useful Improvements in Upright Piano-fortes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this
10 specification.

In the annexed drawing, the works of a piano embodying my improvements, are represented by a vertical section athwart the sounding board and parallel with the motion.
15

(*a*) is the bed which supports the keys (*c*) and extends horizontally from one end jamb or stanchion (*b*) of the piano to the other, (*d*) is the pin block, and (*e*) are the
20 tuning pins; these pins (*e*) are, in my piano, placed below and the bolster (*f*) above, thus superseding the necessity of augmenting the length of the jacks with a greater extent of sounding board, which is
25 indispensable where the pins are on the side farthest from the keys, because it is requisite that the keys should preserve a certain distance with respect to the pins; (*g*) are the strings, (*h*) is the bridge, (*i*) is
30 the sounding board, so placed as to reverberate directly toward the ear of the operator, and also toward the room.

(*j*) is the hammer, which is held back when quiescent, by its own gravity, and
35 since it is in striking, projected toward the sounding board and also toward the ear of the listener the most complete dynamic effect of the instrument is attained.

(*k*) is the rail to which the hammers
40 are pivoted.

(*l*) is the fulcrum upon which the key rocks.

(*m*) is a pin for steadying the key, (*n*) is a bar to which the jack (*o*) is pivoted, (*p*) is a spring which holds the driver to
45 its bearings.

(*q*) is a shoulder against which the driver strikes and by which it is enabled to actuate the hammer.

(*r*) is a check rail which supports the
50 hammer when not in action.

(*s*, *t*,) is the usual hammer catcher arrangement.

(*u*) is the damper cushion.

(*v*) is a pad or cushion.
55

The strings and sounding board are in the drawing very much shortened, simply for convenience of delineation, being represented only about one sixth of their proper length in comparison with the other parts.
60

It will readily be seen that inasmuch as the tuning pins are on the same side with, and immediately above the keys that the sounding board may be extended upward as far as may be desirable, without lengthening the pieces which constitute the movement, which in fact may preserve the same position with respect to the pin block, whether a greater or lesser dimension be
65 given to the sounding board.

I claim as new and desire to secure by Letters Patent—
70

The construction as described of a vertical piano having the tuning pins placed below the lower edge of the sounding board
75 for the objects herein explained.

In testimony whereof, I have hereunto set my hand before two subscribing witnesses.

GE. TRAEYSER.

Witnesses:

GEO. H. KNIGHT,
E. H. PUGH.