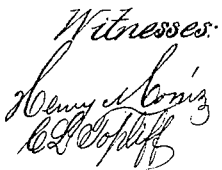


*Patented Dec. 27, 1864.*



G Pratt  
Per Mann  
Atty

# UNITED STATES PATENT OFFICE.

GEORGE PRATT, OF WEST ROXBURY,; ASSIGNOR TO CHICKERING & SONS,  
OF BOSTON, MASSACHUSETTS.

## PIANO-FORTE SECTION.

Specification forming part of Letters Patent No. 45,675, dated December 27, 1864.

*To all whom it may concern :*

Be it known that I, GEORGE PRATT, of West Roxbury, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Piano-Forte Actions; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, and representing a side view of an action with my improvement.

This invention consists in an improved construction of the "jack" of a piano-forte action whereby I combine the peculiar advantages of what are known as the "French" and the "Pleyel" actions.

It also consists in constructing what are known as the "rest-rail" and the "regulating-rail" of separate parts and arranging them at some distance apart, whereby greater convenience is afforded for regulating the jacks without the detachment of the keys from the action, as is necessary when the two are attached and arranged behind the jacks.

A is the hammer, arranged as in the French and Pleyel actions. B is the key. C is the jack, constructed with a projection, *a*, on its back like that of the French action, and with a projection, *b*, in front like that of the Pleyel action, or, in other words, it may be said to resemble the jack of the French action, with the addition of the projection *b* in front, or to be like that of the Pleyel action, with the addition of the projection *a* on the back. *d* is the jack-spring, made of a piece of wire, and having one end inserted tightly into the key, and the other end entering a hole in the projection *b*, like the spring of the Pleyel action. The acting portion of this spring may be of straight or semi-elliptic or other curved form. Such a spring is much more effective and durable than that commonly applied to the French action, the jack thus constructed acting im-

mediately upon and behind the butt of the flange *e*.

D is the regulating-screw by which the letting off is produced and regulated, arranged like that of the French action, to act upon the projection *a*. This makes a much better mode of letting off than that commonly used in the Pleyel action.

E is the regulating-rail, which contains the regulating screw; and F is the rest-rail upon which the hammers fall and rest. These are made separate. The regulating-rail is arranged in the position it commonly occupies in the French action; but the rest-rail is placed farther back nearer to the heads of the hammers, by which means a sufficient space is left between the two rails for the adjustment of the jack, as it enables both the screws *e e*, which secure the jack bottom G to the key to be reached without removing the key, thus securing by this combination all the peculiar advantages of the "Pleyel" and of the "French" actions, as they are usually so called.

I claim as my invention and desire to secure by Letters Patent—

1. A jack with a projection on the back for the regulating-screw to act on, and another projection on the front which is acted on by a straight, curved, or elliptic wire spring, one end of which is inserted in a slot in said projection, the other end of the spring being inserted into and moving with the key, the jack thus operated upon by the spring and by the regulating-screw, and thus constructed acting immediately upon and behind the butt of the flange, substantially as and for the purpose herein specified.

2. Making the rest-rail and regulating-rail separate and with a space between them, when both these rails are behind the jacks, substantially as and for the purpose herein specified.

Witnesses:                      GEORGE PRATT.  
CALVIN ALLEN,  
GEO. H. RICHARDSON.