UNITED STATES PATENT OFFICE.

HENRY J. NEWTON, OF NEW YORK, N. Y.

IMPROVEMENT IN PIANO-FORTE STRINGS.

Specification forming part of Letters Patent No. 8,452, dated October 21, 1851.

To all whom it may concern:

Be it known that I, Henry J. Newton, of the city, county, and State of New York, have invented a certain new and useful Improvement in Piano-Fortes; and I do hereby declare that the following is a full, clear and exact description thereof and of the method of

making and using the same.

It is a well-established fact that the wrapping of the steel strings of musical instruments with silver wire or other soft metal has the effect materially to soften the tone of the instrument. All the larger strings of pianos have been consequently wrapped with such wire in order to secure this advantage. It is found, however, impracticable to carry this out with respect to the smaller strings, in consequence of the difficulty of procuring very fine silver wire and of applying the same to small strings. I have found by a series of experiments that the higher tones of pianos are greatly softened and improved by plating or otherwise coating the smaller strings with silver, the union of the two metals having the effect so to modify the vibrations as to render the tones more round and soft.

My invention consists simply in coating the smaller strings of pianos with silver in any of the usual ways, for the purpose of improving the tone, at the same time protecting them from the rusting action of the atmosphere.

I do not claim as my invention simply the application of silver to the strings of pianos for the purpose stated, as that has before been done by wrapping the strings with silver wires, but when wrapped with wire are liable to rattle when struck by the hammers.

What I do claim as my invention, and de-

sire to secure by Letters Patent, is-

Coating the smaller strings of pianos with silver, or an alloy thereof, for the purpose of improving the tone and preventing the rusting of the strings, substantially as specified.

HENRY J. NEWTON.

Witnesses:

ABR. PORTER BROWN, C. AUSTIN BROWN.