

No. 740,918.

PATENTED OCT. 6, 1903.

A. D. RAMACCIOTTI.

BASS STRING FOR PIANOS OR OTHER MUSICAL INSTRUMENTS.

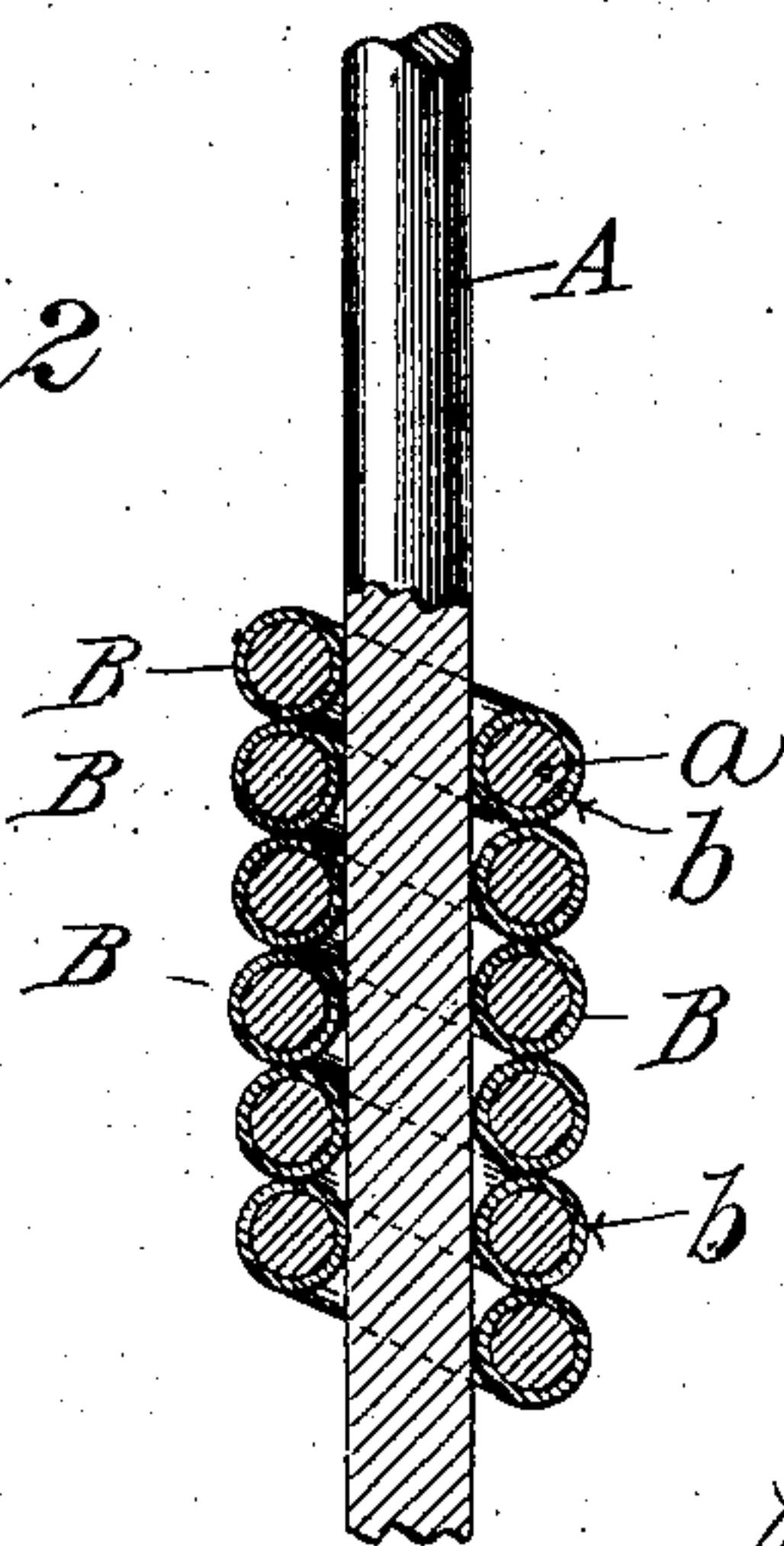
APPLICATION FILED DEC. 13, 1902.

NO MODEL.

Fig. 1.



Fig. 2.



WITNESSES:

Edward C. Rowland.
G. E. Davis

Albert D. Ramacciotti
INVENTOR

BY
Joshua F. Brown
ATTORNEY

UNITED STATES PATENT OFFICE.

ALBERT D. RAMACCIOTTI, OF NEW YORK, N. Y.

BASS STRING FOR PIANOS OR OTHER MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 740,918, dated October 6, 1903.

Application filed December 13, 1902. Serial No. 135,134. (No model.)

To all whom it may concern:

Be it known that I, ALBERT D. RAMACCIOTTI, a citizen of the United States, residing in the city, county, and State of New York, have invented a new and useful Improvement in the Manufacture of Bass Strings for Pianos or other Musical Instruments, of which the following is a specification.

My invention relates to a product rather than a process of manufacture; but the latter may be involved in the former, and while the individual elements have been produced heretofore by similar processes and used individually their combination and simultaneous use as a manufactured article is novel and results in what is most desirable and has not been accomplished before, thus constituting not only distinct improvements, but securing advantages both new and useful. I attain these objects as hereinafter described and produce an article of manufacture illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the finished product, and Fig. 2 a sectional view of its construction.

Similar letters of reference indicate similar parts in the views.

The bass string generally consists of an internal steel wire A, wound around continuously with an iron wire B throughout its length, these wires being properly proportioned, according to the sound desired, and the winding-wire B, of metal *a*, is usually plated with tin *b*. In actual use it has been found impossible through practical necessities of the tin-plating process which cannot be eliminated to coat the iron wire with tin evenly and exactly. Any unevenness of diameter in the string affects accordingly the tone or quality of sound produced. Besides, experience shows that when the tin-plated

iron or winding wire is bent around the steel or core wire the tinning cracks and opens and exposes the iron to dampness, rust, and changes of atmosphere which sooner or later affect and often destroy the tone quality of the string. In order to obviate these objections, I coat or plate the iron wire with copper and then wind it around the steel core-wire. The process of plating permits the application of an absolutely even coat of copper to the iron wire sufficiently elastic to accommodate itself to the necessary winding without cracking or opening anywhere and completely prevents any exposure of the iron winding-wire, and consequently of the steel core-wire, to atmospheric changes and also permits the winding to be done so evenly as to keep the diameter of the finished bass string exactly uniform through its length, so that the quality of its tone is perfect and remains constant, which is of great importance in making up a bass scale. It has the further advantage of being less expensive and more durable.

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

1. A bass string for musical instruments composed of a steel core-wire and an iron winding-wire which has been copper-plated separately before being wound around the core-wire, both combined substantially as specified.

2. As a new article of manufacture, a core-string of steel, a winding-wire of iron, the latter separately copper-plated and subsequently wound around the former, both in combination to form a bass string for musical instruments substantially as specified.

ALBERT D. RAMACCIOTTI.

Witnesses:

GEO. W. BROWN, Jr.,
JOHN SCHMIDLING.