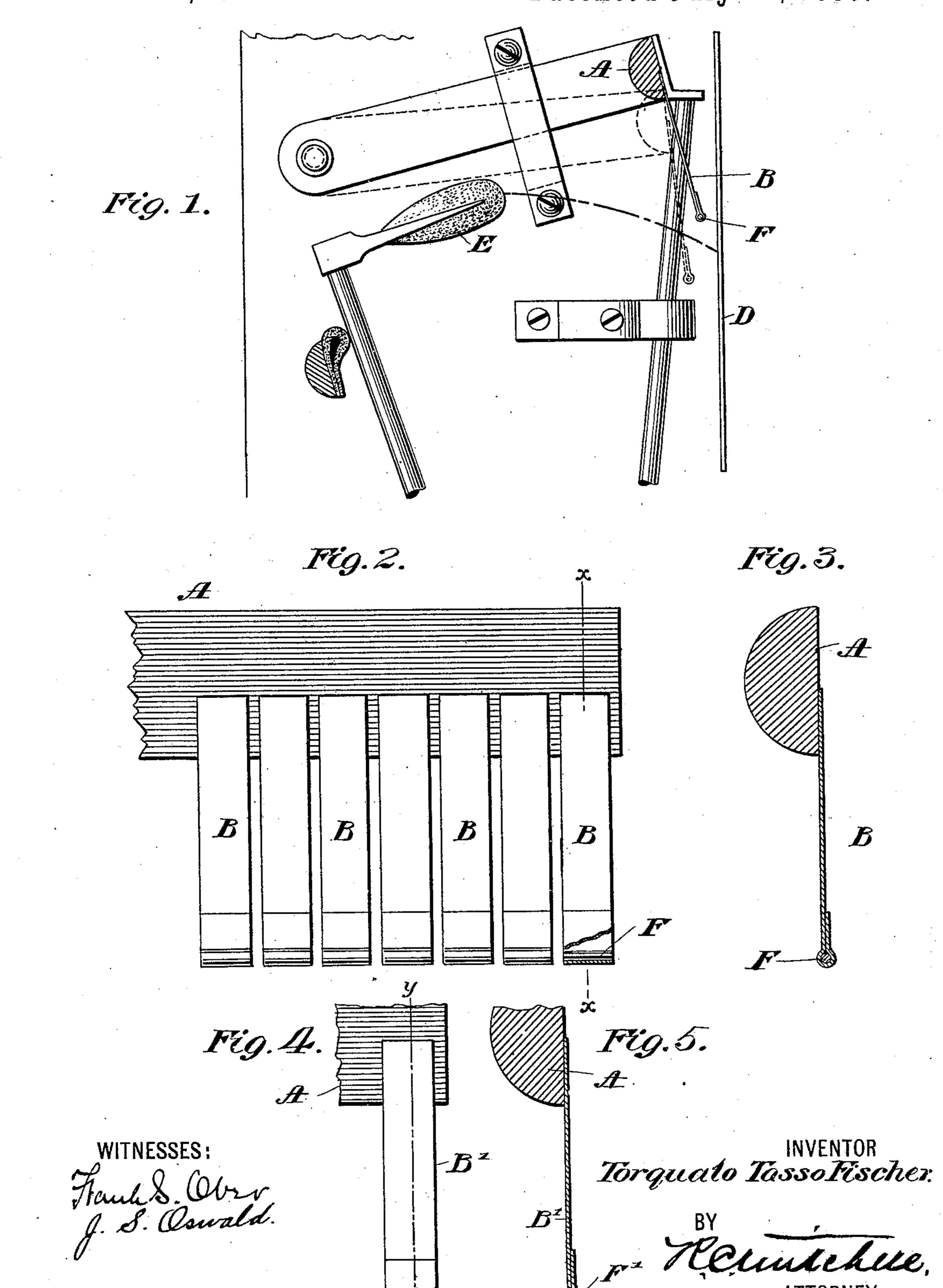
T. T. FISCHER.
PIANO ATTACHMENT.

No. 564,370.

Patented July 21, 1896.



## United States Patent Office.

TORQUATO TASSO FISCHER, OF NEW YORK, N. Y.

## PIANO ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 564,370, dated July 21, 1896.

Application filed May 11, 1896. Serial No. 590, 985. (No model.)

To all whom it may concern:

Be it known that I, Torquato Tasso Fischer, a citizen of the United States, residing at New York city, in the county and State of New York, have invented a new and useful Improvement in Piano Attachments, of which the following is a full, clear, and exact specification.

My invention relates to an improvement in pianos; and it consists in the improved device hereinafter fully described for use therewith.

The object of my invention is to provide a new and improved attachment for use with piano-fortes, and by means of which dulcet tones, resembling those of the guitar and other instruments of a like class, are produced at will.

My invention is illustrated by the accom-

panying drawings, in which—

Figure 1 is a side elevation of my invention, showing its relative position to the adjacent parts of a piano. Fig. 2 is an enlarged front elevation of the attachment in detail. Fig. 3 is a vertical section on line x x of the detail shown in Fig. 2. Fig. 4 is a front elevation of a modification of my invention, and Fig. 5 is a vertical section on line y y of the attachment illustrated in Fig. 4.

Similar letters refer to similar parts through-

30 out the several drawings.

A is a bar supporting a series of strips B B, and it is the purpose of this invention to provide one strip for each piano-string.

D is a piano-string.

E is a hammer operating in the ordinary manner.

The strips B are by preference made of a stiffened fabric, a thin leather, or other suitable material not metal.

F is a weight made of metal or other suitable material, provided at the free extremities of the strips B B, each weight being sheathed in and preferably entirely protected by its supporting-strip. In all cases, however, it is not necessary that the ends of the weights be covered. This covering of the weights may be accomplished by folding each strip as shown in Figs. 2 and 3. The purpose of providing this weight at the extremity of each strip B is found in that the tone-color is heightened thereby, is rendered more even, and is more easily controlled than over a plain strip

unweighted. The purpose of sheathing the weights within the strips is to prevent any metal from engaging with the strings of the 55 piano, thus obviating any harsh metallic sound and entirely preventing the felt facing of the hammers from striking said weights, (which are usually formed of a metallic substance,) which would tend to abrade and informed the said felt facing, this latter damage being particularly conspicuous in other constructions after the piano has been in use some time, and parallel ridges are formed in the facing of the hammer by contact with its 65 corresponding strings.

Any suitable means may be utilized for shifting the position of the supporting-bar A. When the said bar is in the position indicated by the solid lines in Fig. 1, the strips are held 70 out of the arc in which the hammers E are adapted to move. When the said bar is in the position indicated by the dotted lines in Fig. 1, the strips are in the arc in which the hammers move and located between the ham-75 mers and the strings, so that when thus interposed and the hammer is advanced to contact with the string it engages with a strip B instead, causing the same to strike the string producing the subdued tone, resembling 80 closely the above-referred-to class of instruments.

The vibratory action of each strip B is improved and its tendency to assume the normal position is made more certain by the pressence of the weighted extremities of the said strips. Obviously this attachment may be provided in either an upright or a grand piano, it being understood that in the latter case it is desirable that each strip B be sufficiently 90 stiffened to retain its substantially horizontal position.

The modification shown in Figs. 4 and 5 consists in providing a strip B' with a loosely-vibrating weight F', shielded within its lower 95 extremity. This vibrating weight F' may be loosely held in a surrounding casing G, like-wise protected and held by said strip B', as shown in Fig. 5, the extremities of said casing G being closed sufficient to prevent the vibrating weight F' from becoming accidentally separated therefrom.

The presence of the loose vibratory weight F', held at the lower end of the strip B' and

confined within the same, increases the vibratory action of the strip and adds to the efficiency of its operation.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. An attachment for a piano, said attachment comprising a strip adapted to be interposed between a string and a hammer, said strip carrying a vibrating weight toward its free extremity, said weight being loosely held within said strip and protected thereby from contact directly with the hammer or string, substantially as described.

2. An attachment for a piano, said attachment comprising a strip adapted to be interposed between a hammer and a string, said strip carrying a weight toward its free extremity, said weight loosely vibrating in a surrounding casing, said casing being held 20 within said strip and protected thereby from contact directly with said hammer or string, substantially as described.

T. TASSO FISCHER.

Witnesses:

R. C. MITCHELL, J. S. OSWALD.