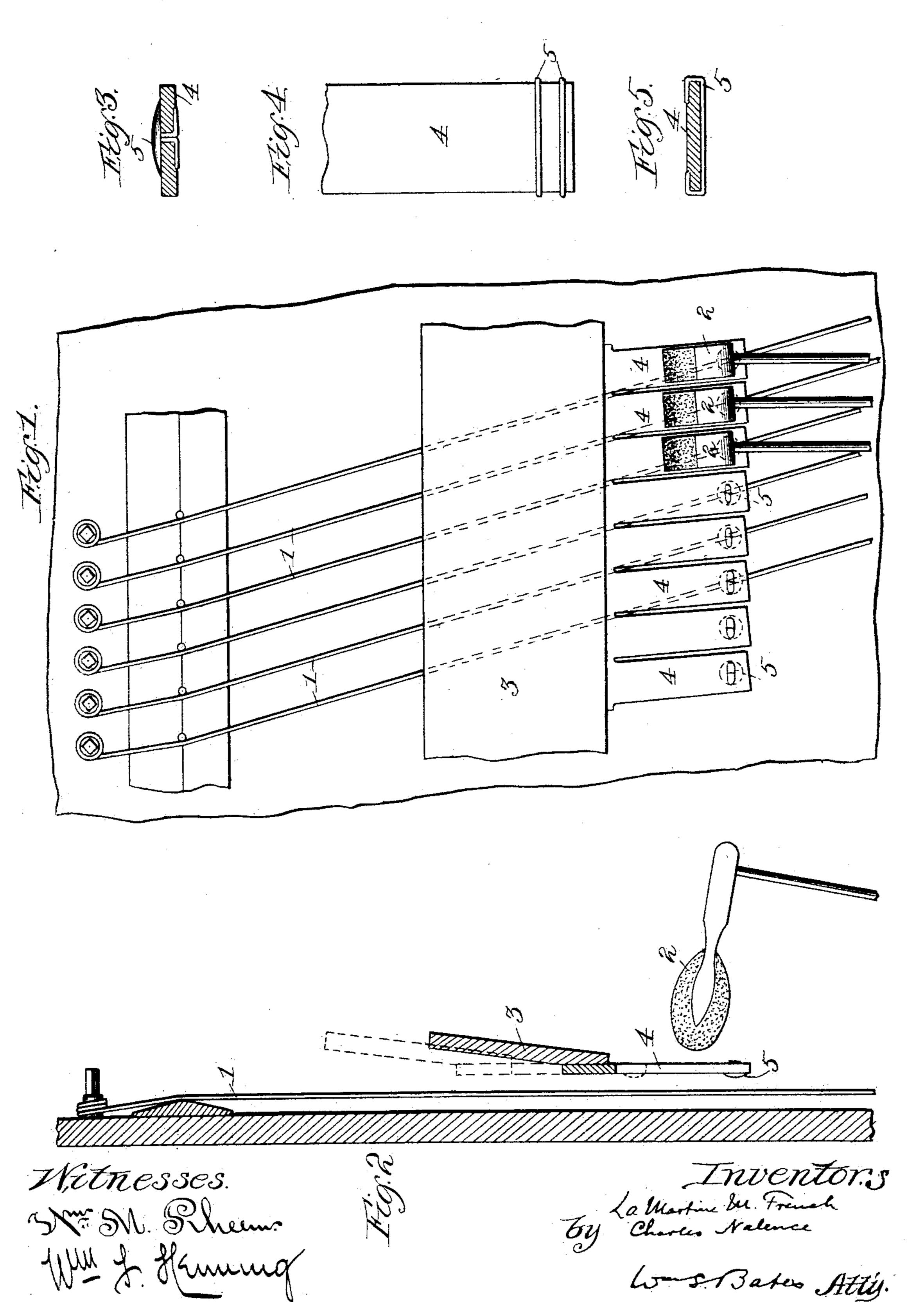
(No Model.)

LA MARTINE M. FRENCH & C. NALENCE.

PIANO ATTACHMENT.

No. 515,426.

Patented Feb. 27, 1894



THE NATIONAL LITHOGRAPHING COMPANY. WASHINGTON, D. C.

## United States Patent Office.

LA MARTINE M. FRENCH AND CHARLES NALENCE, OF CHICAGO, ILLINOIS.

## PIANO ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 515,426, dated February 27, 1894.

Application filed October 27, 1893. Serial No. 489, 250. (No model.)

To all whom it may concern:

Be it known that we, LA MARTINE M. FRENCH and CHARLES NALENCE, of Chicago, Illinois, have invented certain new and useful 5 Improvements in Piano Attachments, whereof

the following is a specification.

Our invention relates to piano attachments for changing the tone of a piano, causing it to resemble a guitar, mandolin, zither, &c. 10 To this end we arrange on the piano, a series of strips of flexible material, each having on it a metallic striker. These strips are connected to a bar operated by a pedal, by which they can be moved so that the ordinary ham-15 mer of the piano will strike the flexible strip. The strip thus kills the tone which would otherwise be produced by the string, but the metallic striker on the strip striking the string produces the modified tone which we desire. 20 A reverse movement of the pedal withdraws the strips, leaving the hammers free to strike

duce the ordinary tone of the piano. In the accompanying drawings we have 25 shown our invention applied to the Everett upright piano, using the ordinary third pedal of that piano for moving the strips, but of course it may be applied to other pianos.

the strings in the ordinary manner and pro-

Figure 1 is a front view of part of the piano 30 showing our invention applied, and with the strips in operative position. Fig. 2 is a vertical section of same showing also, in dotted lines, the withdrawn position of the strips. Fig. 3 is a cross section of a strip at the point 35 of attachment of the metallic striker. Fig. 4 is a face view of a strip with wire striker.

Fig. 5 is a cross section of same.

In the figures, 1 are the strings and 2 the

hammers.

3 is a bar extending across the strings, and movable by a pedal in the usual manner. To the bar 3 we connect a series of strips or

tongues 4 of flexible material, as felt. Near the lower end of each strip we secure a metallic striker 5, either in the form of a but- 45 ton, as in Figs. 1, 2 and 3, or of cross wire, as in Figs. 4 and 5, or in any other suitable form.

The operation of the invention is as follows: A pressure on the pedal moves the bar 3 and strips 4 within the action of the hammers 2, 50 so that the hammers strike the material of the strips above the striker 5, and press it against the strings 1. The soft strip kills the effect of the blow of the hammer on the string, but the hard striker 5 is thrown against the string 55 and produces a tone.

By the use of a metallic striker we secure a characteristic tone produced by the metal

striking the metal strings.

We claim— 1. In a piano, in combination with the strings, a series of non-resonant, soft flexible strips having hard strikers or buttons on that face next to the strings; and hammers to act upon the strips to one side of the said but- 65 tons.

2. In a piano, the combination with the strings; of a series of non-resonant, soft flexible strips having hard metallic buttons or strikers on that face next to the strings; and 70 hammers to act upon the strips to one side of the said buttons.

3. In a piano, the combination with the strings; of a series of flexible strips having on that face next the strings, hard buttons or 75 contacts; and a series of hammers adapted to strike the strips to one side of the said buttons.

> LA MARTINE M. FRENCH. CHARLES NALENCE.

Witnesses:

W. S. BATES, RALPH VAN DYKE.