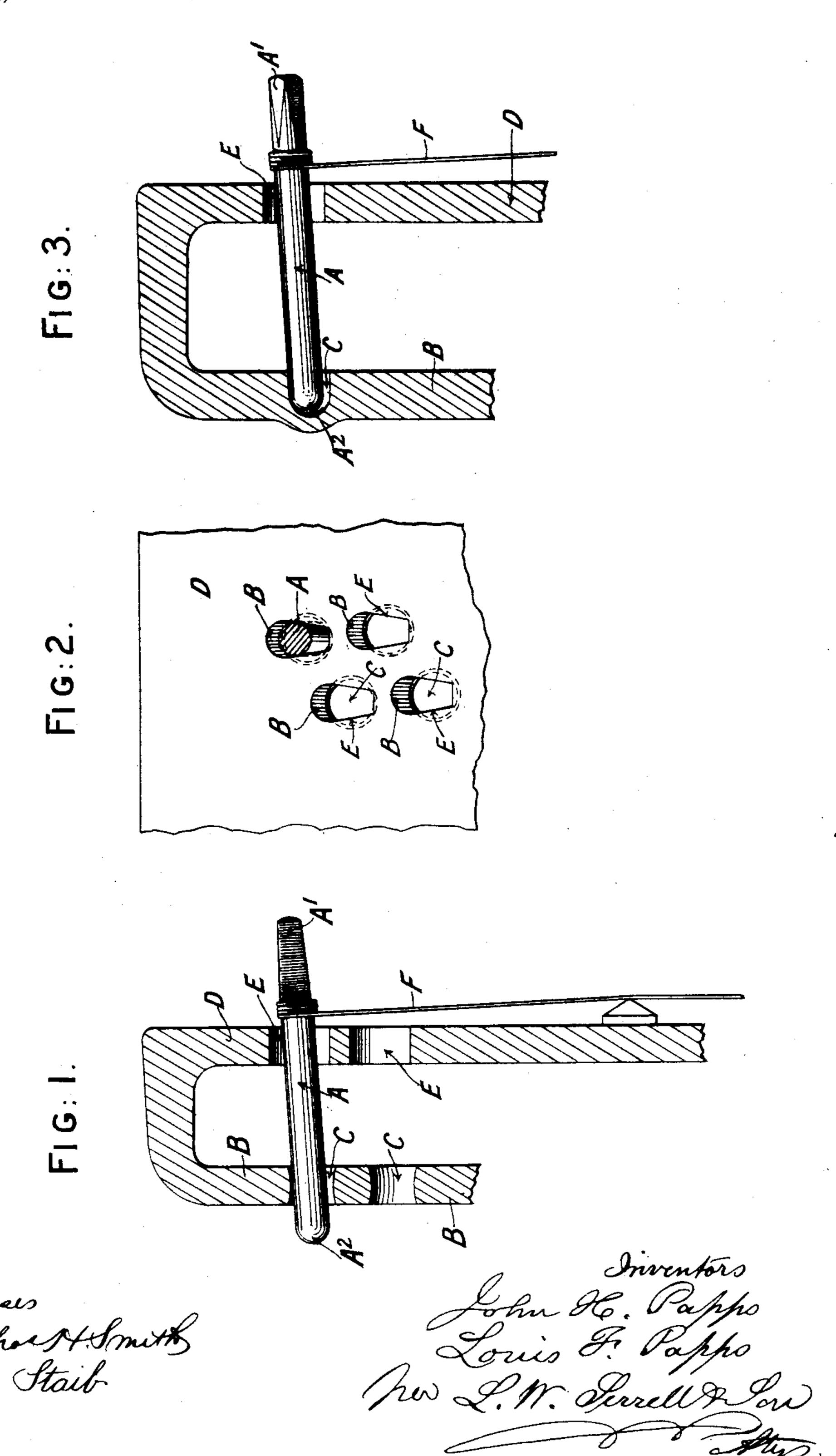
Patented Aug. 16, 1898.

J. H. & L. F. PAPPS.

DEVICE FOR SUSTAINING AND ADJUSTING TENSION OF WIRES OF PIANOFORTES.

(Application filed Dec. 29, 1897.)

(No Model.)



United States Patent Office.

JOHN HENRY PAPPS AND LOUIS FRANK PAPPS, OF SOUTHSEA, ENGLAND, ASSIGNORS OF ONE-THIRD TO THOMAS HARRISON, OF LONDON, ENGLAND.

DEVICE FOR SUSTAINING AND ADJUSTING TENSION OF WIRES OF PIANOFORTES.

SPECIFICATION forming part of Letters Patent No. 609,210, dated August 16, 1898.

Application filed December 29, 1897. Serial No. 664,374. (No model.) Patented in England May 27, 1897, No. 13,089.

To all whom it may concern:

Be it known that we, John Henry Papps and Louis Frank Papps, subjects of the Queen of Great Britain, residing at Southsea, 5 in the county of Hants, England, have invented new and useful means or devices for sustaining and adjusting the tension of wires of pianofortes and like instruments, (for which we have obtained a patent in Great Britain, 10 No. 13,089, bearing date May 27, 1897,) of which the following is a specification.

In the manufacture of pianofortes and like instruments it is a common practice to employ a heavy beech plank to receive the 15 "wrest-pins," which are driven into holes in such plank. This arrangement has many disadvantages; and the object of our invention is to provide improved means whereby the wrest-pins are securely held and readily ca-

20 pable of being adjusted.

Referring to the accompanying drawings, Figure 1 illustrates in side sectional elevation so much of the framework of a pianoforte with a wrest-pin in position as is necessary 25 to explain our invention. Fig. 2 is a front view of Fig. 1 with wrest-pin in section; and Fig. 3 is a similar view to Fig. 1, illustrating a somewhat modified arrangement.

According to our invention we employ 30 wrest-pins A of cylindrical form, in some cases finely serrated, having one end A' squared or polygonal, so as to receive a key, and the opposite end thereof A² preferably rounded.

The framework of the pianoforte is formed 35 with a rear metal plate B, having a number of holes C, into which the rounded ends of the wrest-pins fit. The holes C may extend wholly or partially through the plate B, in the former case as illustrated in Fig. 1 and 40 in the latter as at Fig. 3, in which case the base of the hole C limits the endwise movement of the wrest-pin A should undue pressure be put upon it when applying a key, or any suitable checks may be arranged to limit 45 the lateral movement of the wrest-pins.

A front plate D is provided, in which are formed a number of apertures E, located di-

rectly in front of the before-mentioned holes C. The apertures E in the front plate D (best seen at Fig. 2) are wider at the top than at 50 the bottom and are of elongated formation, their longest axis being in a line with the pull of the wire.

The wrest-pins A pass through the apertures E in the front plate D and, as before 55 stated, take into the holes C in the rear plate B. Thus the wrest-pin A is free to turn and also move radially in a vertical direction about the holes C in the rear plate B.

A pianoforte-wire F is attached to the wrest- 60 pin A beyond and in front of the front plate D, and upon turning the wrest-pin A the wire F is tightened and the wrest-pin A is pulled downward in the tapered slotted aperture E of the front plate D. The end A², being 65 in the hole C, is prevented from rising, the sides of the tapered aperture E gripping the wrest-pin A, and thus preventing the pin from turning back after the wire has been tightened.

Thus it will be seen that by our invention the wrest-pins may be placed in position without requiring to be driven or forced and are loose when in position until the wire is tightened. In a similar manner they may be 75 readily taken out after having loosened the

tension of the wire.

We claim as our invention—

In a device for sustaining and adjusting the tension of wires of pianofortes and like 80 instruments, the framework having a front supporting-plate with tapering slotted apertures therein and a back plate with apertures therein and cylindrical wrest-pins passing into such apertures whereby the wires when 85 tightened pull the wrest-pins into the tapered apertures in the plate so that they are gripped and prevented from turning, as set forth.

> JOHN HENRY PAPPS. LOUIS FRANK PAPPS.

Witnesses:

W. STOAKES, WILLIAM J. ROACH.