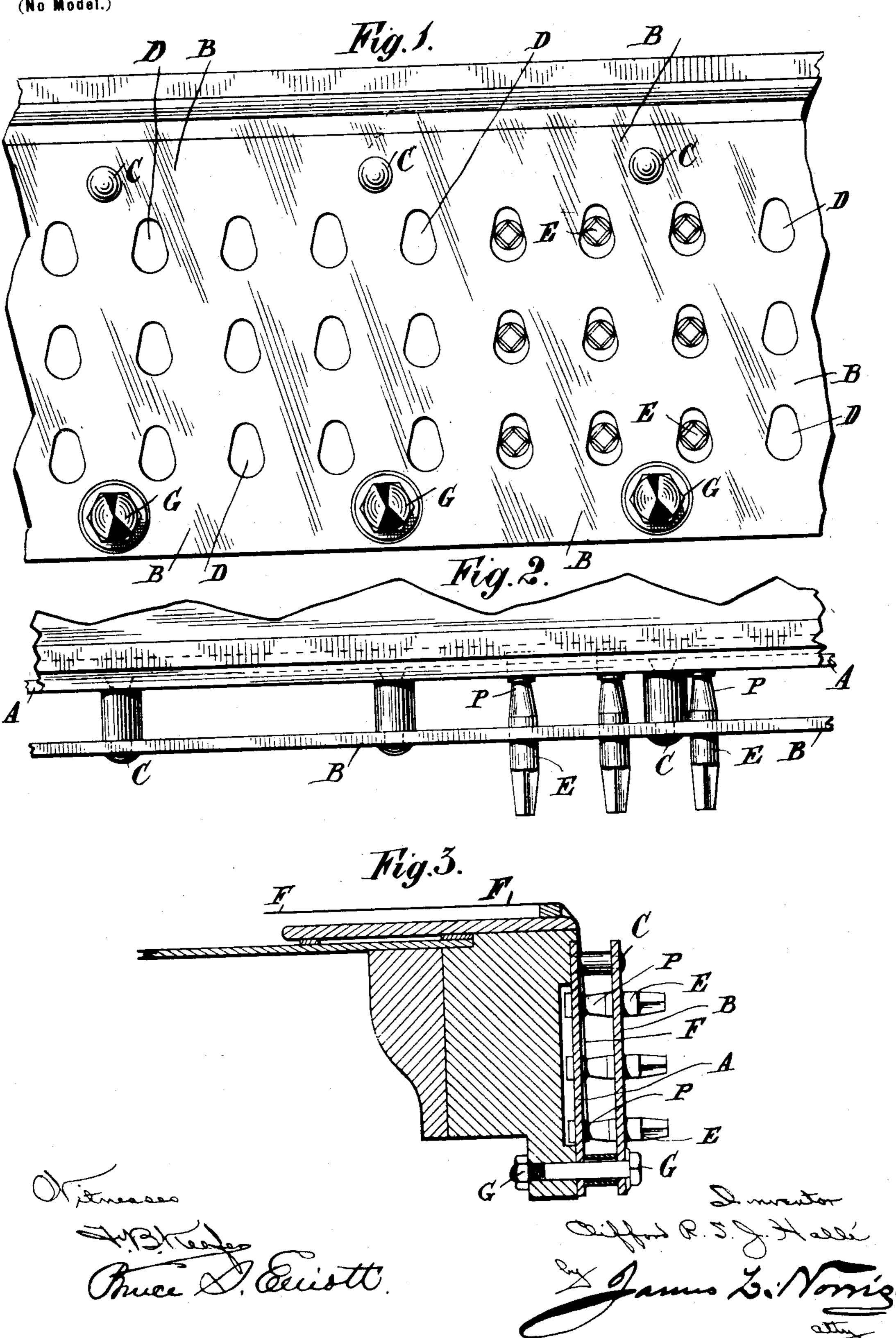
## C. R. S. J. HALLÉ. WREST PLANK FOR PIANOFORTES.

(Application filed Mar. 5, 1901.)

(No Model.)



## United States Patent Office.

CLIFFORD ROBERT STEPHEN JOHN HALLÉ, OF LONDON, ENGLAND.

## WREST-PLANK FOR PIANOFORTES.

SPECIFICATION forming part of Letters Patent No. 682,066, dated September 3, 1901.

Application filed March 5, 1901. Serial No. 49,860. (No model.)

To all whom it may concern:

Be it known that I, CLIFFORD ROBERT STE-PHEN JOHN HALLÉ, a subject of the King of Great Britain, residing at 50 Lincolns Inn 5 Fields, London, England, have invented certain new and useful Improvements in the Construction of Wrest-Planks for Pianofortes and other Stringed Instruments, of which the following is a specification.

The object of my invention is to so construct a wrest-plank for pianofortes and other stringed instruments of a like character that great strength is insured, the pull of the strings being from about the center of the pin and between the bearings, these being of such a character that the greater the tension of the strings the firmer the grip or bite of the pins.

My invention will be understood from the zo following description, aided by the accompa-

nying drawings, in which—

Figure 1 is a front elevation of a portion of my wrest-plank. Fig. 2 is a plan of same. Fig. 3 is a side elevation, partly in section, showing its connection to a frame of a down-

striking grand-action piano.

The purpose of the invention is to substitute a metal wrest-plank for the wooden one in common use, the wrest-plank being com-30 posed of two rigid strips of steel or other suitable metal A B, held firmly at a proper distance from each other, shouldered by rivets C. In these strips or plates there are holes D to receive the pins E or other suitable 35 means, one hole in the back plate A and one in the front plate B for each pin E, which is so placed that when the tension is applied to the string F the strain is taken by both plates AB, these holes being smaller at the top or 40 sides than at the bottom or sides, as shown. The wire E is strung on the part P of the pin E between the plates A B, so that when the tension is applied to the string F the pin E is forced into the smaller part of the holes D 45 and held fast and the pressure being taken by both plates. The plates A B can be secured together to form the wrest-plank by riv-

ets C, and other holes are provided through which bolts or screws G are passed to secure the wrest-plank to the piano-frame, short 50 tubes surrounding the bolts G between the plates A B to assist in keeping them the proper distance apart. The key E is reduced at the part F, around which the wire is wrapped before placing the pin in position, thus allowing the pin to be passed through the hole D with the wire upon it previous to stringing.

What I claim, and desire to secure by Let-

ters Patent, is-

1. A wrest-plank for pianofortes and other 60 stringed instruments, consisting of a pair of vertically-extending perforated plates, wrest-pins mounted within the perforations of the plates, extending through the latter and adapted to receive the strings of the instrudadapted to receive the strings of the instructs for connecting the plates, a series of rivets for connecting the plates together, tubes introduced between the said plates for spacing them apart, and means extending through the said tubes and plates for securing the latic riposition, substantially as herein shown and described.

2. A wrest-plank for pianofortes and other stringed instruments, consisting of a pair of plates, tubes interposed between the said 75 plates for spacing them apart, wrest-pins extending through the said plates and adapted to receive the strings of the instrument thereon between the said plates, and means extending through the tubes and plates for securing the latter in position.

3. A wrest-plank consisting of a pair of vertically-extending plates suitably spaced apart and connected together, and wrest-pins extending through the said plates and adapted 85 to receive the strings of an instrument there-

on between the said plates.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CLIFFORD ROBERT STEPHEN JOHN HALLÉ. Witnesses:

WM. O. BROWN, IREÑEO FRANCO. VALHO.