A. HURLEY.

BRIDGE FOR VIOLINS OR SIMILAR INSTRUMENTS.

(Application filed July 23, 1901.)

(No Model.)

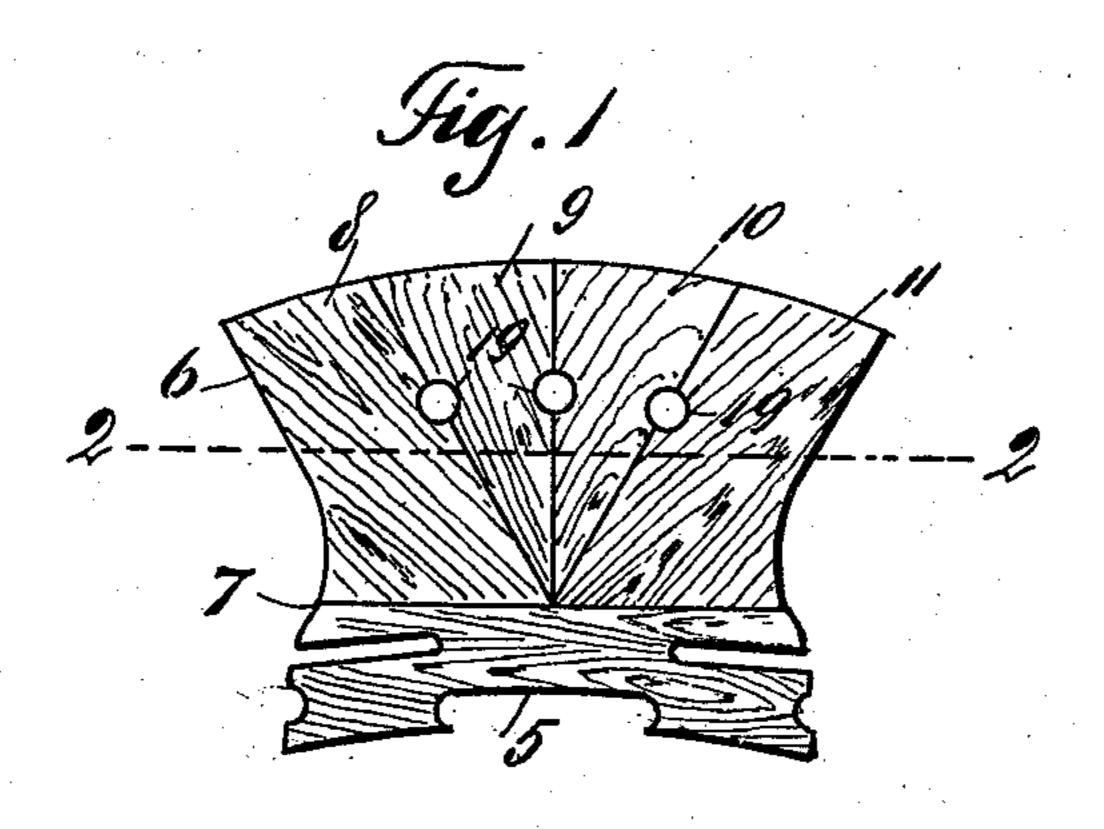
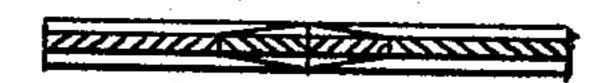


Fig. 2



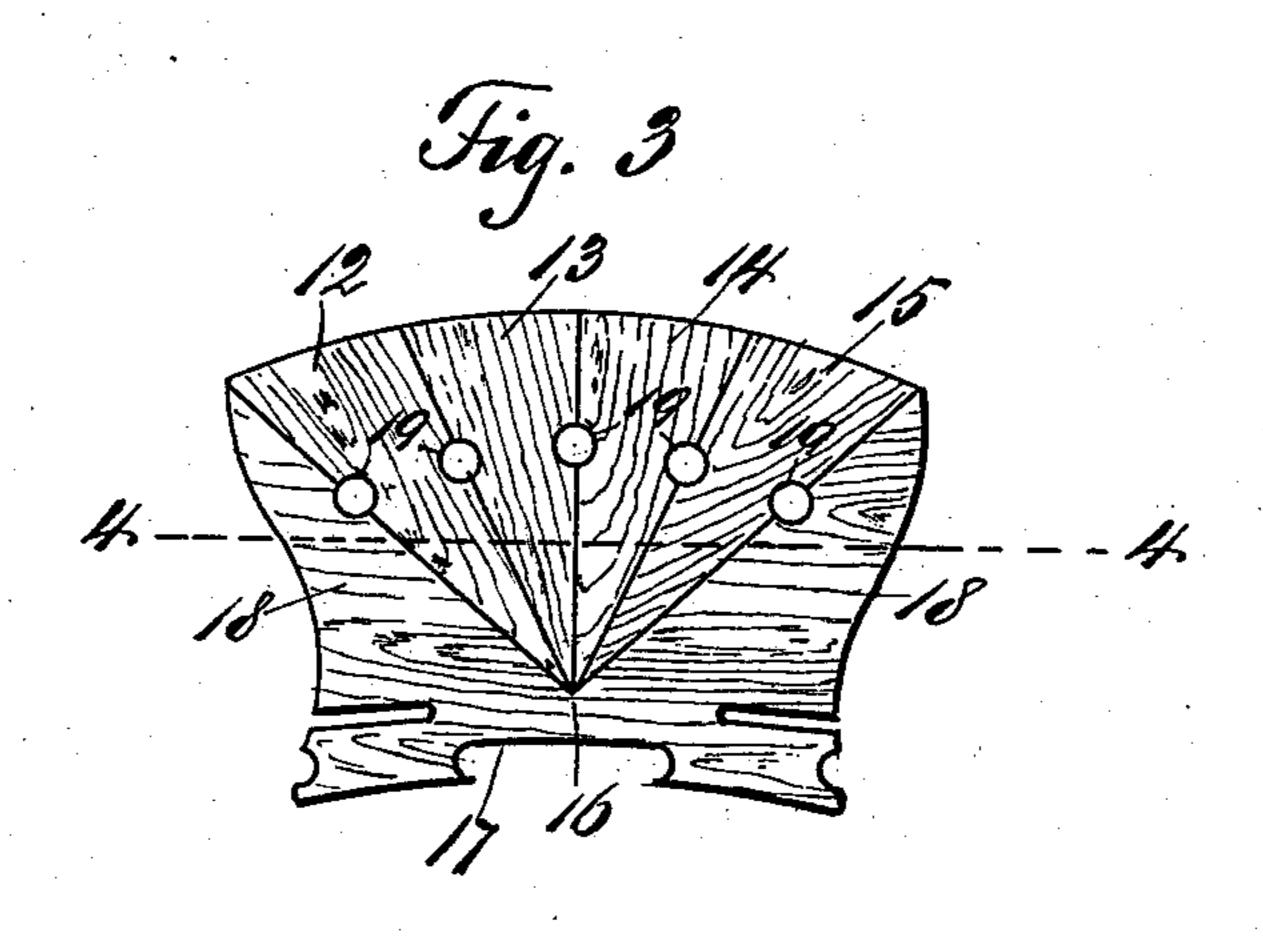


Fig. 4.

18 12 13 14 15 18

WITNESSES: A. M. Meller H. Stewart

INVENTOR

Arthur Hurley

By

Attorneys.

United States Patent Office.

ARTHUR HURLEY, OF TONDU, ENGLAND.

BRIDGE FOR VIOLINS OR SIMILAR INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 693,648, dated February 18, 1902.

Application filed July 23, 1901. Serial No. 69,452. (No model.)

To all whom it may concern

Be it known that I, ARTHUR HURLEY, a subject of the King of Great Britain, residing at Felinfach, Tondu, in the county of Glamor-5 gan, England, have invented certain new and useful Improvements in Bridges for Violins or Similar Instruments, of which the following is a full and complete specification, such as will enable those skilled in the art to which o it appertains to make and use the same.

The object of this invention is to provide a bridge for a violin or similar instrument which is of improved construction and by means of which the tone of the instrument is 15 improved.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated 20 by the same reference characters in each of the views, and in which—

Figure 1 is a side view of a bridge made according to my invention; Fig. 2, a section on the line 2 2 of Fig. 1; Fig. 3, a view simi-25 lar to Fig. 1, showing another form of construction, and Fig. 4 a section on the line 4.4

of Fig. 3. In the practice of my invention, as shown in Fig. 1, I provide a bridge for a violin or 30 similar instrument comprising a base portion 5 and a top portion 6, the line of division between said portions being at 7. The top portion 6 of my improved bridge is composed of separate parts, four of which are shown in 35 Fig. 1, and the grain of the wood from which these parts are formed converges toward a common point at or near the center of the bottom portion 5 of the bridge. In practice each of the parts of the top portion of the 40 bridge is adapted to support one of the strings of the instrument and the point of convergence of the grain of the wood from which the parts of the top of the bridge are made should be as near as possible to the sounding-45 board of the instrument. By means of this construction the vibrations of the strings of the instrument are conveyed longitudinally

along the grain of the wood of the top portion

of the bridge, and the tone of the said vibra-

the bottom portion 5 of the bridge runs lon-

producing the desired result. In the construction shown in Figs. 1 and 2

of the separate parts of the top portion of the

bridge, and this arrangement also assists in

the top portion of the bridge which supports the strings is composed of four pieces 8, 9, 10, and 11, while in the construction shown in Figs. 3 and 4 the said top portion of the bridge 60 is composed of a similar number of pieces arranged as shown at 12, 13, 14, and 15, the grain of these pieces converging toward a common point at 16. In this form of construction the base or bottom portion 17 of the 65 bridge is provided with upwardly and outwardly directed side members 18, which extend upwardly to the upper side corners of the bridge, and the top or crown portion of the bridge, which supports the strings and con- 70 sists of the parts 12, 13, 14, and 15, is substantially triangular in shape. The grain of the wood from which the bottom portion 17 of the bridge is made runs horizontally, as in the construction shown in Fig. 1, and the op- 75 eration will be substantially the same as that shown in said figure.

In each of the forms of construction herein shown and described the body of the top portion of the bridge is preferably provided with 80 transverse holes or openings 19, which are arranged at the points where the separate parts thereof are connected, and this construction also adds to the tone of the vibrations, and the separate parts of the bridge may be con-85 nected in any desired manner.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bridge for a violin or similar instru- 90 ment composed of top and bottom portions of wood, the grain of the bottom portion running horizontally while the grain of the top portion converges toward the center of the bottom portion, substantially as shown and 95 described.

2. A bridge for violins or similar instruments, comprising a bottom portion composed of wood, the grain of which runs horizontally, and a top portion composed of wood, and of 100 separate pieces so arranged that the grain thereof converges toward the center of the 50 tions is materially improved. The grain of bottom portion, substantially as shown and gitudinally thereof or at an angle to the grain I described.

3. A bridge for violins and similar instruments, composed of top and bottom portions of wood, the grain of the wood of the bottom portion being arranged horizontally and the top portion being composed of separate pieces secured together and to the bottom portion, and the grain of the wood of which converges toward the center of the bottom portion, substantially as shown and described.

In testimony that I claim the foregoing as 10 my invention I have signed my name, in presence of the subscribing witnesses, this 13th day of May, 1901.

ARTHUR HURLEY.

Witnesses:
FRED W. GLOSSOP,
ERNEST L. PHILLIPS.