(No Model.)

D. O'HARE.

BRASS MUSICAL INSTRUMENT.

No. 340,813. Patented Apr. 27, 1886.

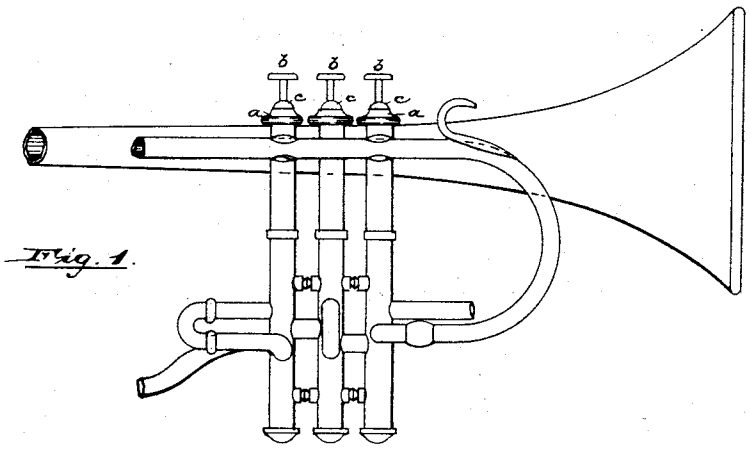


Fig. 1.

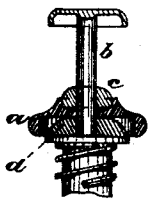


Fig. 2.

Attest:

Frodk. F. Campbell

Fred. S. Adams.

Inventor:

Daniel O'Hare,

by Drake & Co.

Attys.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

DANIEL O'HARE, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF TO FREDERICK R. MADDOCK, OF SAME PLACE.

BRASS MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 340,813, dated April 27, 1886.

Application filed March 12, 1885. Serial No. 158,585. (No model.)

To all whom it may concern:

Be it known that I, DANIEL O'HARE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Brass Musical Instruments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 represents an elevation of a brass musical instrument with my improvement applied thereto, and Fig. 2 a cross-section of one of the valves thereof.

The object of this invention is to prevent the disagreeable noise occasioned by the finger-pieces or keys of a "brass" instrument striking the hard and inelastic cork on the body of said instrument, to prevent the escape of wind when blowing the same, and to increase the durability of the said instrument.

Heretofore musical instruments of the kind generally known as "brass instruments" have been provided with cork bearings, which receive the force of impact caused by depressing the finger-pieces when playing upon said instruments. Said bearings have been defective, in that the cork loses its elasticity, becomes brittle, and soon cracks and is thus rendered useless. The bearing, being fastened to its seat by sealing-wax or other cement, cannot readily be removed by the owner without destroying it, so that the instrument has to be sent to the maker to renew the said cork bearing at consequent inconvenience and expense. As this has to be often repeated, it is very objectionable.

In carrying out my invention I insert or arrange in or on the seat *a* of a musical instrument, around the key *b* thereof, a rubber cushion, *c*, to prevent the noise that would be otherwise occasioned by the key striking a hard inelastic substance—such as cork—above referred to. I also insert a rubber washer, *d*, on the under side of the said seat, to prevent noise in the return movement of the key.

In addition to preventing the sound mentioned, the rubber cushion and washer, because of the elasticity thereof, hug the key more closely and prevent the escape of wind between the key and seat.

What I claim as new is—

1. The combination, with the seat *a* and finger-piece *b* of a brass musical instrument substantially such as described, of a rubber cushion, *c*, substantially as and for the purposes set forth.

2. In a brass musical instrument, the combination, with the seat *a* and key *b*, of a rubber cushion, *c*, and rubber washer *d*, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of February, 1885.

DANIEL O'HARE.

Witnesses:

OLIVER DRAKE,

FREDK. F. CAMPBELL.