(No Model.)

G. W. L. SCHWEICH.

CORNET.

No. 301,758. Patented July 8, 1884.

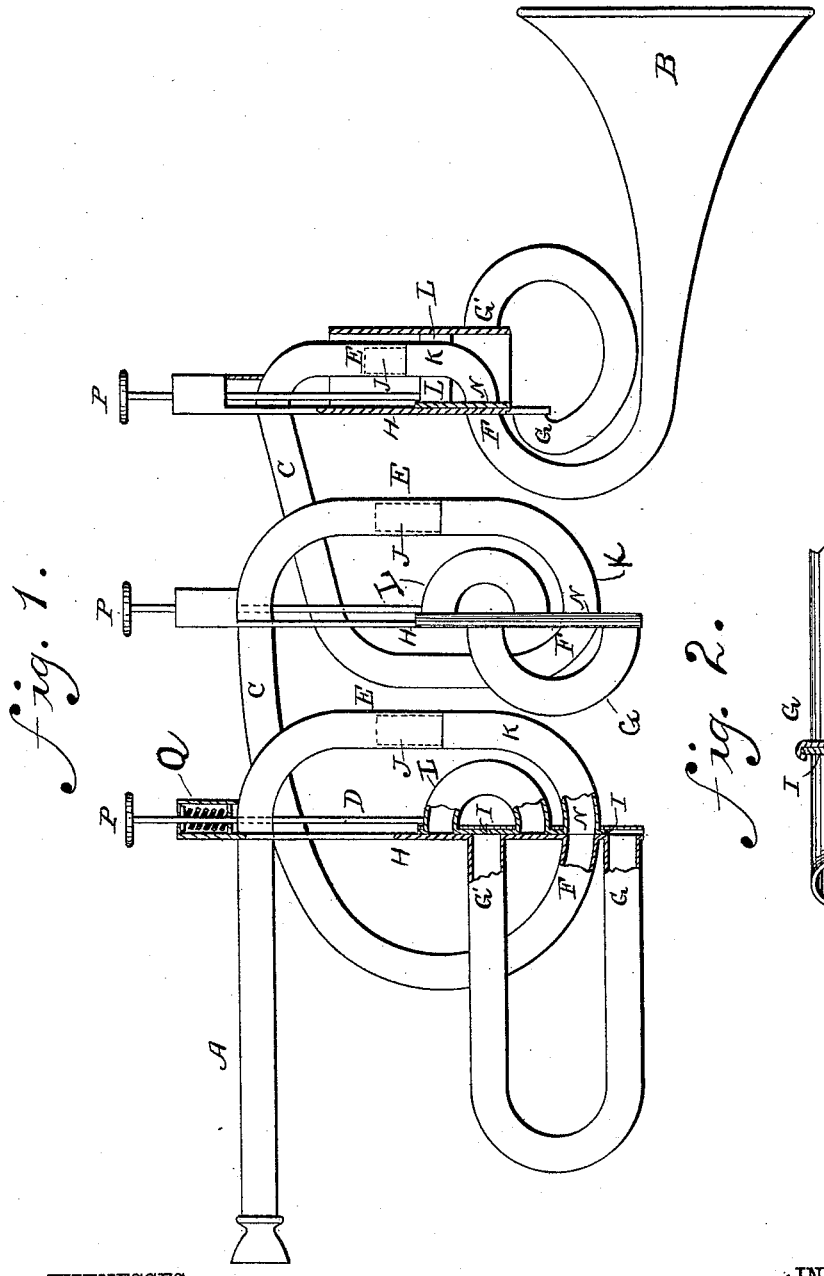

Fig. 1.

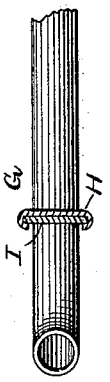

Fig. 2.

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UNITED STATES PATENT OFFICE.

GEORGE W. L. SCHWEICH, OF RICHMOND, MISSOURI.

CORNET.

SPECIFICATION forming part of Letters Patent No. 301,758, dated July 8, 1884.

Application filed November 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. L. SCHWEICH, a citizen of the United States, residing at Richmond, in the county of Ray and State of Missouri, have invented certain new and useful Improvements in Cornets, of which the following is a description.

My invention relates to that class of cornets in which finger-poppets act upon slide-valves to vary the tones produced by the instrument; and it has for its object to produce means whereby a short motion of a poppet will cause a change of tone to any extent required, yet limited in each instance by the particular construction of the instrument.

To this end my invention consists in the construction and combination of parts forming a slide-valve for a cornet, as hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, part in section, of a cornet, showing my invention; and Fig. 2 is a detail in section.

A represents the mouth-piece of the cornet, and B the bell or mouth. The body between these two extremes is wholly severed, once or more, as at E F, for the purpose of connecting with one or more extensions, G, in order that the tone of the cornet may be changed by thus increasing the tubular length of its air-passage. To make and break this connection at will I interpose a peculiar slide-valve, in which one or more flanged and lipped plates, H, fixed to the body of the instrument, serve to guide one or more valve-plates, I, sliding therein. Each plate I carries two short tubes, K and L. The tube K is telescoped at one end, J, with the body of the instrument at E parallel with plate H, and at its other end, N, it is secured in plate I, through which it communicates with the body at F when in its normal position, as shown. The tube L is wholly mounted on the sliding plate I, both ends opening through said plate. The extension G is mounted on the fixed plate H, both of its ends opening through said plate. One end, F, of the body opens through the fixed plate H, and its other end may extend directly to the bell B, or to the telescoping end J of another slide-valve. The distance between the fixed parts or ends F G′ is equal to the distance between the two parts or ends of the tube L, and the distance between the parts F G is equal to the distance between the part N and the adjacent part of tube L. The slide-valve is provided with a poppet, P, having a spring, Q, which acts to raise the valve to its upper position, as shown, in which condition the air-passage from the mouth-piece A to the bell B is through the shortest tube-connection. Now, if a poppet, P, be pressed down, it will slide the plate I, disconnecting the parts N and F, and connecting part N with part G, and the parts of tube L with parts F and G′, at the same time extending the telescopic slide J. Thus the length of both tubes G and L is added to the air-passage of the instrument by a quick movement of the operator's finger. These interposed tubes may be of any suitable length, and any suitable number of my valves may be added to a single instrument.

It is a characteristic of my invention that there are three fixed parts, three sliding parts, and a telescoping joint, making eight pipe ends, which are brought to connect in two different ways by pressing or releasing a single poppet. The telescoping joint prevents disturbing the vibrations of the instrument during the instant of sliding the valve. While only two very short and consequently light tubes are carried by the slide-valve, they serve to connect a tube of any desired length with the air-passage, thus preventing friction and requiring but a very light pressure of the finger to operate the valve.

While I prefer to use only one sliding plate I, to carry the short tubes K L, in connection with the telescoping joint E J, yet I may use two such sliding plates parallel with each other and connected together to act as one in connection with the telescoping joint, for the purpose of changing the direction of the tube G, as in the modification of my valve shown near the bell end B of the instrument.

What I claim as my invention, and wish to secure by Letters Patent, is—

1. The combination, with a cornet, of a slide-valve having two tubes, one end of one of which is fitted to telescope with a fixed end

of the cornet, and the other ends of which connect with fixed pipes, as described.

2. A cornet having four fixed tube ends, to three of which a plate having slideways is secured, in combination with a valve-plate fitted to slide in said ways, two tubes attached to said valve-plate, one of the ends of said tubes being fitted to telescope with one of the aforesaid fixed ends of the instrument, and the other three ends of said valve-tubes fitted to connect with the three fixed tube ends before stated at different times, and means for sliding said valve, substantially as described.

GEORGE W. L. SCHWEICH.

Witnesses:
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