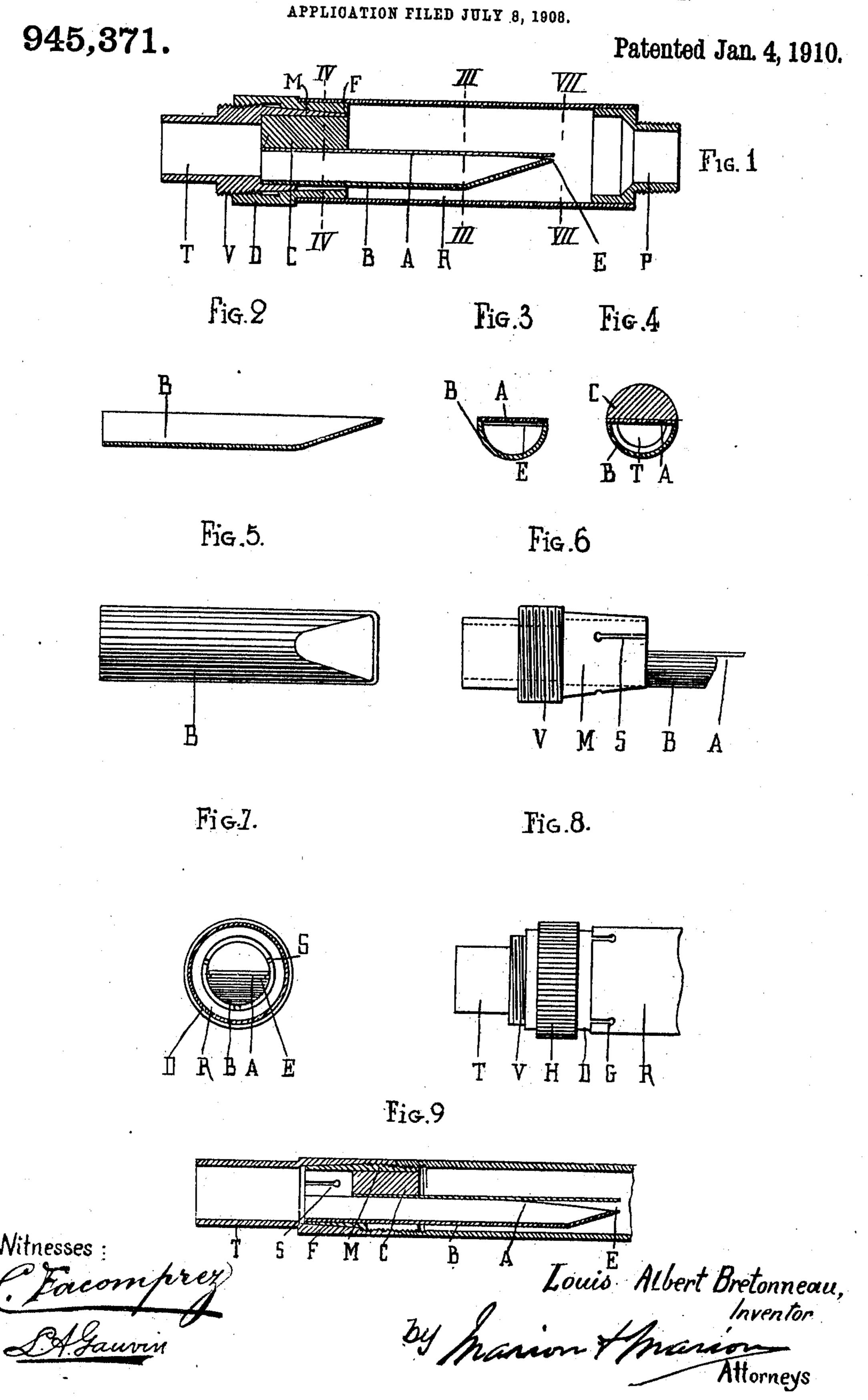
## L. A. BRETONNEAU. MOUTHPIECE OF HORNS FOR AUTOMOBILES AND THE LIKE. APPLICATION FILED JULY 8, 1908.



## UNITED STATES PATENT OFFICE.

LOUIS ALBERT BRETONNEAU, OF PARIS, FRANCE.

HORNS FOR AUTOMOBILES AND THE LIKE.

945,371.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed July 8, 1908. Serial No. 442,606.

To all whom it may concern:

Be it known that I, Louis Albert Breton-NEAU, a musical-instrument maker, residing at Paris, in the French Republic, have in-5 vented certain new and useful Improvements in the Mouthpieces of Horns for Automobiles and the Like, of which the following is a specification.

This invention relates to improvements in 10 detachable metallic reeds for the mouthpieces of horns for automobiles, bicycles and the like, in order to permit the easy removal of the reed its regulation and easy cleaning, without destroying the mouthpiece,

15 to which it is applied.

Different types of the improved reed, according to the said invention are illustrated

in the accompanying drawing.

Figure 1 is a longitudinal section of the 20 mouthpiece, provided with its removable reed. Fig. 2 is a longitudinal section of the reed holder. Fig. 3 is a cross section, according to the line III—III of the Fig. 1, of the reed in position in the holder. Fig. 4 is a 25 cross section, according to the line IV—IV of the Fig. 1, showing the reed-holder, provided with the reed and the key serving to fix the latter to the mouthpiece. Fig. 5 is a plan view of the Fig. 2. Fig. 6 is a side 30 view of the mouthpiece, provided with its removable reed, but not mounted on the horn. Fig. 7 is a cross section, according to the line VII—VII of the Fig. 1. Fig. 8 is a view showing an arrangement of the mouth-35 piece on the air supply pipe. Fig. 9 is a view showing an alternative arrangement of the reed on the tube holding the mouthpiece.

The mouthpiece of the horn consists of: 40 Firstly, a reed holder B, consisting in a semicircular body terminated at its front end by a kind of spoon, or inclined surface, shaped so as to leave, at E, a free space for the passage of the air. Secondly, a metal 45 reed A perfectly smooth, and of the same width as the reed holder B on which it is placed, the said reed being able to vibrate under action of the passage of the air at E. Thirdly, a key C serving to keep in its set-50 ting the reed holder provided with its reed. This setting, is composed of a joint pipe T, provided with a screw thread V, and, at its front end, with a male cone M which is slit at S. The reed-holder, provided with 55 the reed A and the key C, is first introduced

into this front part, the final fixing of the whole being assured in the following manner.

A socket D is screwed on to the joint pipe T of the horn, and is provided with a conical piece F, corresponding to the conical piece 60 M. Owing to the tightening of the socket caused by the screwing of the latter on the pipe T, the cone F comes into contact with the walls of the conical piece M, and the pressure, continuing under the action of the 65 inclined surfaces of the cones M and F, the slits S in the piece M are closed, and the reed is held firmly in its position.

The whole arrangement of the mouthpiece consisting of the metallic reed A, of the 70 reed-holder B, of the key C fixing the pieces A and B on to the joint pipe T, and of the conical socket D, is then introduced into a tube R, which is connected to the air supply pipe. This tube R is soldered, at one end, 75 to the socket D, and carries, at the other end, a joint P, which is connected to the connection to the bag supplying the compressed air

in the apparatus.

In Fig. 8, another arrangement for fitting 80 the mouthpiece holder is shown. The socket D is made a very tight fit in the tube R, which is provided with slits G, for the purpose to insure the connection of the parts D and R together. In order to change or 85 remove the reed, for any purpose, it is sufficient to unscrew the tube T fixed to the socket D. The mouthpiece holder is then independent of the joint R, and the cone M no longer holds the key C which keeps the 90 reed A in position; then, the latter can be easily replaced, regulated, or cleaned as desired.

In the modification of Fig. 8, the socket D is provided with a milled portion H, which 95 allows the slacking back of the conical portion F, when the socket D has been disconnected from the joint R. In both cases the independence of the reed, and of the parts carrying it is assured, and this permits the 100 partial changing of these parts, their modification, regulation and cleaning, without necessitating the destruction of the whole.

In Fig. 9 another arrangement is shown. According to this modification of the said 105 invention, the joint pipe R is directly screwed on the socket D, the latter being provided with a conical part having slits S, on which is screwed the corresponding conical part F of the pipe T.

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Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:

In a mouthpiece for horns for automobiles, a screw-threaded joint-pipe provided at its outer end with a slitted tapering extension, a reed holder resting within said tapering extension, a reed detachably carried by the reed holder, a detachable key securing the reed and reed holder within the tapering extension, a screw-threaded socket engaging the thread of the joint-pipe and

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provided with a part tapered oppositely to the joint pipe, in combination with a circular pipe rigidly secured to the socket, the pipe inclosing the reed and reed holder, and having at the end opposite the joint pipe an opening leading to the compressed air supply.

In witness whereof I have hereunto set my

hand in the presence of two witnesses.

LOUIS ALBERT BRETONNEAU.

Witnesses:

Paul Joseph Edouard Caron, H. C. Coxe.