

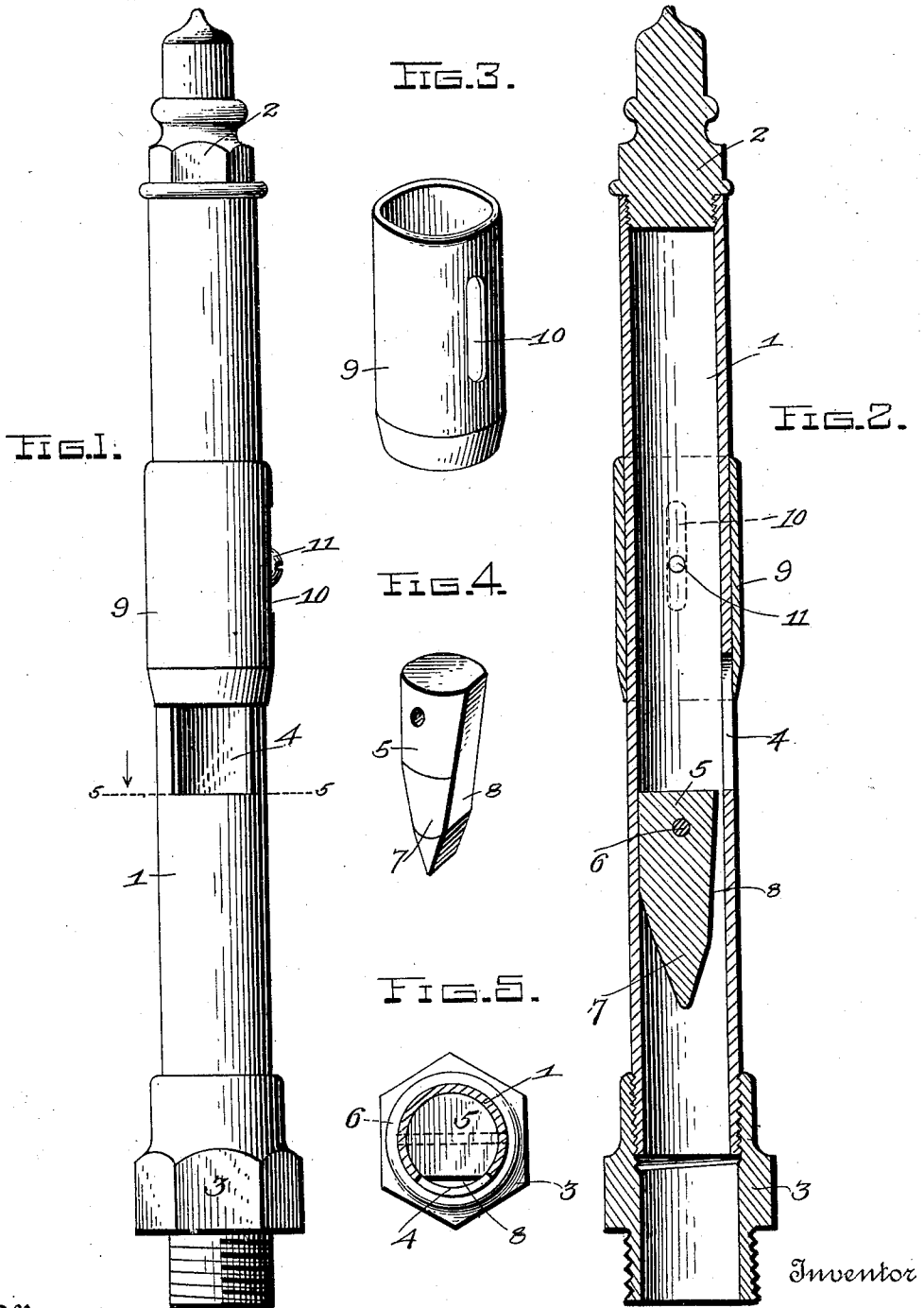
H. ELLISON.

WHISTLE.

APPLICATION FILED OCT. 25, 1909.

992,487.

Patented May 16, 1911.



Witnesses

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# UNITED STATES PATENT OFFICE.

HORACE ELLISON, OF BOSTON, MASSACHUSETTS.

## WHISTLE.

992,487.

Specification of Letters Patent.

Patented May 16, 1911.

Application filed October 25, 1909. Serial No. 524,488.

### *To all whom it may concern:*

Be it known that I, HORACE ELLISON, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Whistles; and I do 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.

This invention relates to an improved whistle for use on locomotives, automobiles and similar vehicles and the object thereof is to provide simple and effective means for varying the tone of the whistle.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a side elevation of a whistle having this improved tone changer applied thereto; Fig. 2 is a longitudinal vertical section thereof; Fig. 3 is a perspective view of the tone changer detached; Fig. 4 is a similar view of the plug detached and Fig. 5 is a horizontal section taken on the line 5—5 of Fig. 1.

In the embodiment illustrated, the whistle comprises a tubular member, 1, having a closure, 2, at its upper end removably mounted therein preferably by screw threads. A coupling member, 3, is secured on the lower end of the member, 1, and is designed for connecting the whistle to a steam, air or other pipe for supplying the operating medium thereto. An opening, 4, is arranged in said tubular member, 1, intermediately of its ends and a plug, 5, constructed as shown in Fig. 4, is mounted in the lower end of the tube with its upper flat end extending flush with the lower wall of the opening, 4, and is held in this position by any suitable means, preferably by a bolt or rivet, 6, which is passed transversely through the plug. The body of the plug 5 is partially rounded and has an inclined flat face 8 opposite said rounded portion. Said rounded portion and

flat face merge into a wedge shaped end so that when the plug is arranged in the tubular member 1, a space is formed between one side of the wedge 7' the inclined flat face and the wall of the tubular member, said space decreasing in size from the part 7' of the wedge to the upper end of said flat face and by the construction of the plug as above set forth more force is given the fluid as it passes upward through said space and through the opening 4.

This whistle is very sensitive and is operable by a one-half pound pressure of steam or other fluid. A sleeve, 9, fits closely around the tube, 1, and is adapted to slide thereon, it being arranged to extend over and partially close the opening, 4, when desired, for a purpose to be described. This sleeve is preferably provided with a longitudinally extending slot, 10, through which a set screw 11 extends and engages an aperture in the body of the tube 1. This screw is designed to be tightened for clamping the sleeve at any desired position on the tube to prevent accidental movement thereof after it has been once adjusted. The slot, 10, also serves to limit the movement of the sleeve in opposite directions. This sleeve, 9, is adjustable over the opening, 4, to regulate the size thereof and vary the tone of the whistle. When the sleeve is moved upward to its extreme limit, the full area of the opening is exposed and a deep sounding whistle is produced. The reduction of the opening produces a whistle of a shriller tone.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

I claim as my invention:—

A whistle comprising a tubular member with an opening in one side thereof, said member also having an aperture above said opening, a sleeve mounted on the outside of said tubular member having an elongated longitudinal slot therein, a screw inserted into said aperture and engaging the slot of the sleeve so as to adjustably hold the same

on said member and thereby regulate the size of the side opening, an elongated plug detachably secured to the inner surface of said member and having on one side an inclined flat face which merges into a face inclined more to the vertical, said plug being also inclined on its opposite face forming a wedge shaped end said flat face and the adjacent side of the wedge forming an up-

wardly decreasing space between them and 10 the wall of the tubular member.

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

HORACE ELLISON.

Witnesses:

GEORGE W. POND,  
IRVING C. BUTLER.

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