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AIR DISCHARGE NOZZLE

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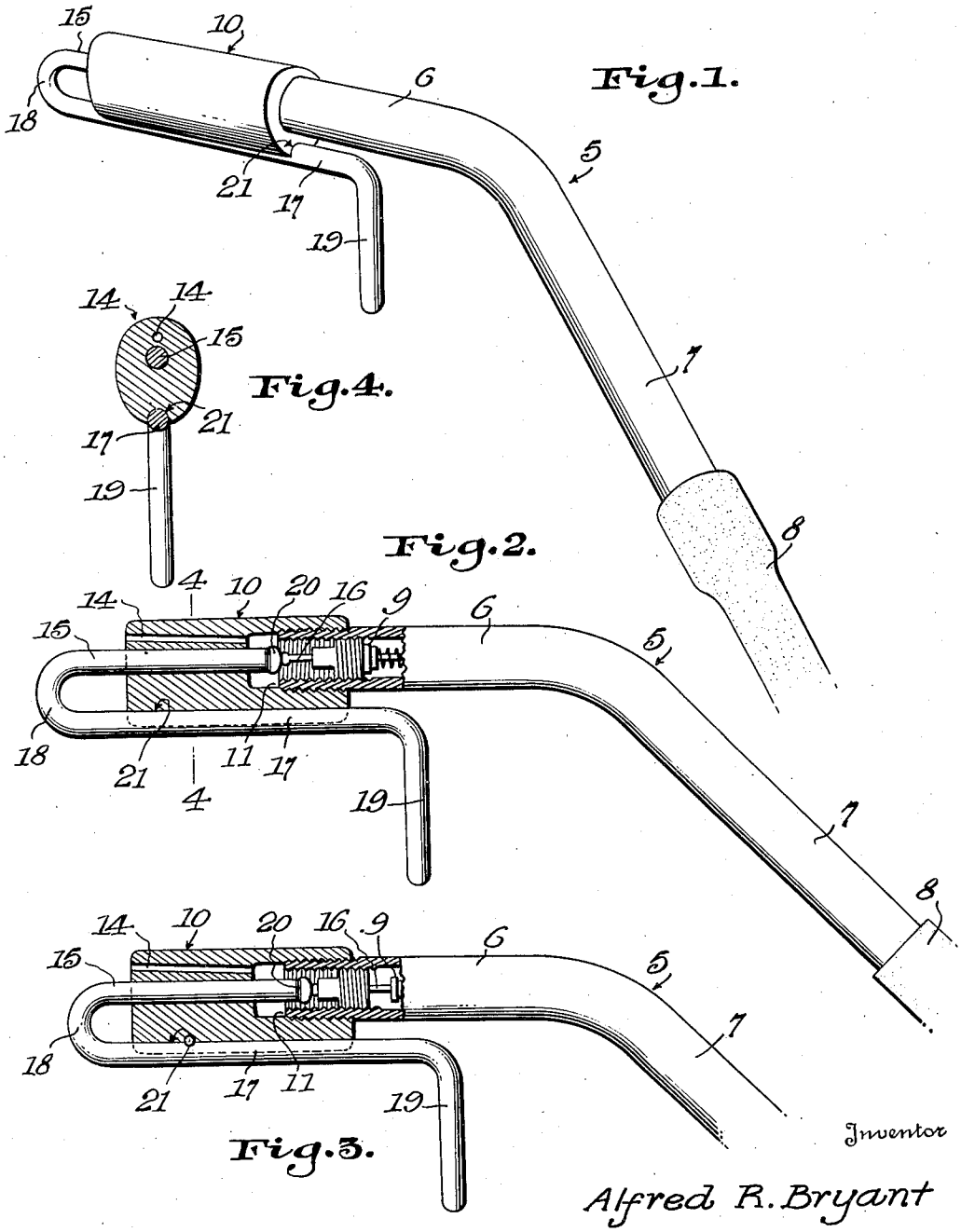


Fig.1.

Fig.4.

Fig.2.

Fig.3.

Inventor

Alfred R. Bryant

By H. B. Williamson & Co

Attorneys

WITNESS

H. Woodard

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AIR DISCHARGE NOZZLE

Alfred R. Bryant, Bloomington, Ind.

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4 Claims. (Cl. 251—137)

The invention aims to provide a new and improved device designed primarily for use by barbers to blow loose hair which has been clipped or cut off, from the necks and heads of patrons, overcoming the necessity of using more or less unsanitary brushes for this purpose.

In carrying out the above end, a further object is to provide an air discharge device which may be conveniently held in one hand and operated by a trigger to discharge a blast of air whenever required.

Another object is to provide a novel construction enabling use of an ordinary tire valve core as the stop valve for the air, the trigger being provided with a portion within the nozzle to open said valve whenever the trigger is pulled.

Yet another object is to provide a novel construction in which the trigger for opening the air valve is carried solely by the nozzle, whereby said nozzle and the trigger carried thereby may be quickly and easily mounted upon an air-conducting tube having a rearwardly opening valve, in readiness for use to open said valve when the trigger is pulled rearwardly.

A still further aim is the provision of an exceptionally simple and inexpensive construction, yet one which will be reliable, durable and in every way desirable.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawing.

Figure 1 is a perspective view.

Figure 2 is a central vertical longitudinal sectional view showing the air valve closed.

Figure 3 is a view similar to Fig. 2 but showing the air valve opened by a rearward pull on the trigger.

Figure 4 is a transverse sectional view on line 4—4 of Fig. 2.

A preferred construction has been illustrated and will be rather specifically described, with the understanding, however, that within the scope of the invention as claimed, variations may be made.

The numeral 5 on the drawing denotes a rigid tube of metal or other preferred material, the front and rear portions 6 and 7 of said tube being disposed at an obtuse angle to each other, said rear portion 7 constituting a handle from which the front or air outlet portion 6 of the tube projects forwardly. The rear end of the tube is connectable in any preferred manner with an air hose 8 extending from any suitable source of compressed air. Within the front portion 6 is a forwardly closing valve 9 which is preferably a conventional inflation valve core.

Rigidly connected with the front end of the tube portion 6, is an elongated body or nozzle 10, the rear end of said body or nozzle being preferably provided with a socket 11 into which the front end of said tube portion 6 fits, the two being provided with screw threads 12. The nozzle or body 10 is provided with a longitudinal bore 13 and with a smaller air discharge bore 14, said bore 13 being provided to accommodate a portion of a valve opening trigger hereinafter described, and when this trigger is actuated to open the valve 9, compressed air is discharged through the bore 14.

The above mentioned trigger, in the present disclosure, comprises a rod 15 slidable longitudinally in the bore 13 and having its rear end in abutting relation with the valve stem 16, a pull rod 17 extending longitudinally under the nozzle or body 10, a U-shaped connecting portion 18 in front of the body or nozzle 10 and connecting the rods 15 and 17 with each other, and a finger-engaging portion 19 projecting downwardly from the rear end of the rod 17, all of the portions 15, 18, 17 and 19 being preferably bent from a single piece of stiff wire or rod. The rear extremity 20 of the rod 15 is upset somewhat in the present disclosure to prevent forward sliding of said rod from the bore 13.

The nozzle or body 10 is provided with appropriate means to hold the entire trigger against swinging about the axis of the rod 15, said nozzle or body being preferably provided with a longitudinal groove 21 slidably receiving the rod 17, for this purpose.

It is preferable that the nozzle or body 10 be substantially elliptical in transverse section and that it be reduced in size at its front end, which is particularly desirable in permitting insertion of said nozzle or body between a patron's neck and his collar to blow out loose hair.

From the foregoing taken in connection with the accompanying drawing, it will be seen that a novel device has been provided for carrying out the objects of the invention. The rear portion 7 of the tube 5 may be conveniently held in one hand and the finger-engaging portion 19 of the trigger readily pulled with one finger of the same hand whenever air is to be discharged, and by using the device to blow off loose hair which has been clipped or cut, there is no necessity of using the old-fashioned duster which is now prohibited

by law in a number of States, due to its unsanitary nature.

While preferred details have been shown, attention is again invited to the possibility of making variations within the scope of the invention as claimed.

I claim:

1. A device of the class described comprising an air-conducting element, a forwardly closing valve within the front portion of said air-conducting element, an air discharge nozzle connected with the front end of said air-conducting element and having a longitudinal bore, and a valve-opening trigger slidably carried by said nozzle, said trigger comprising a valve-opening rod slidable in said bore and having its rear end disposed in abutting relation with said valve, a pull rod at the exterior of said nozzle, a connecting portion rigidly connecting the front ends of the two rods, and a finger-engaging portion on the rear end of said pull rod, the outer side of said nozzle being provided with a longitudinal groove in which said pull rod is slidable.

2. An attachment for an air-conducting tube having a rearwardly opening valve in its front end; said attachment comprising an elongated air discharge nozzle having provision at its rear end for connecting it with the front end of the air-conducting tube, said nozzle being provided with a longitudinal bore, a valve opening rod slidable in said bore and projecting forwardly from said nozzle, the rear end of said rod being intended to abut the valve of the air discharge tube, a pull rod extending along the exterior of said nozzle and having a downwardly projecting fingerpiece at its rear end by means of which it may be rearwardly slid, and a rod-connector spaced in advance of said nozzle and rigidly connecting the front end of said pull rod with the front end of said valve opening rod, said nozzle being provided with an external longitudinal groove slidably engaged by said pull rod to hold said finger-piece properly positioned in readiness for use.

3. An attachment for an air-conducting tube having a threaded front end and a rearwardly opening valve in said front end; said attachment comprising an elongated air discharge nozzle having a threaded socket in its rear end and a reduced bore extending from said socket through the front end of the nozzle, said socket being intended to receive the threaded front end of the air-conducting tube, a valve opening rod slidable in said bore and projecting forwardly from said nozzle, the rear end of said valve opening rod being disposed in said socket and intended to abut the valve of the tube, said rear end of said valve opening rod being provided with a stop within said socket to prevent forward withdrawal of the rod from said bore, a pull rod extending along the exterior of said nozzle and having a downwardly projecting finger-piece at its rear end by means of which it may be rearwardly slid, and a rod connector spaced in advance of said nozzle and rigidly connecting the front end of said pull rod with the front end of said valve opening rod, said nozzle being provided with external means slidably engaged by said pull rod to hold said finger-piece properly positioned for use.

4. A structure as specified in claim 3; said external means comprising a longitudinal groove in which said pull rod is slidably received to hold said finger-piece properly positioned for use.

ALFRED R. BRYANT.