

No. 883,717.

PATENTED APR. 7, 1908.

F. I. JUDSON.
TRICK PIPE.

APPLICATION FILED NOV. 15, 1907.

Fig. 1.



Fig. 2.

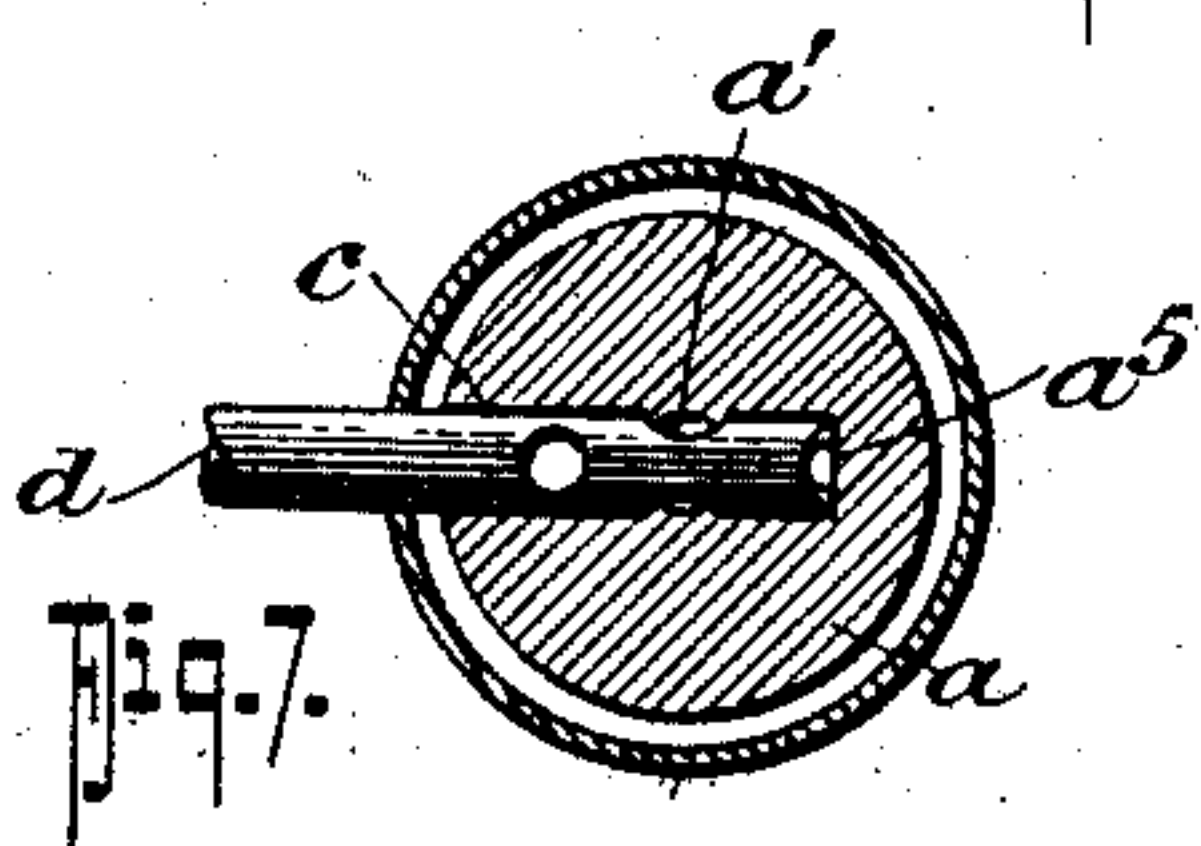
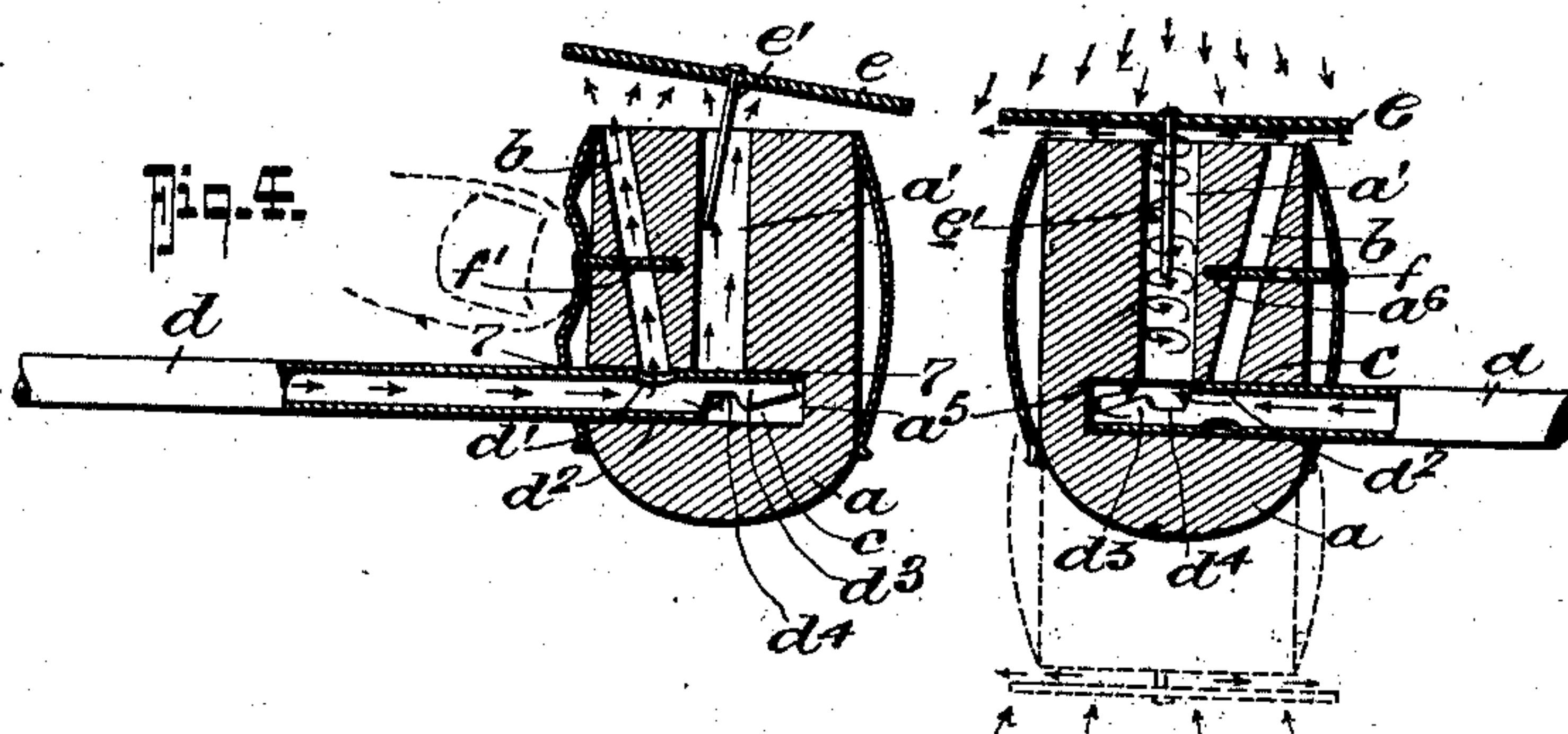
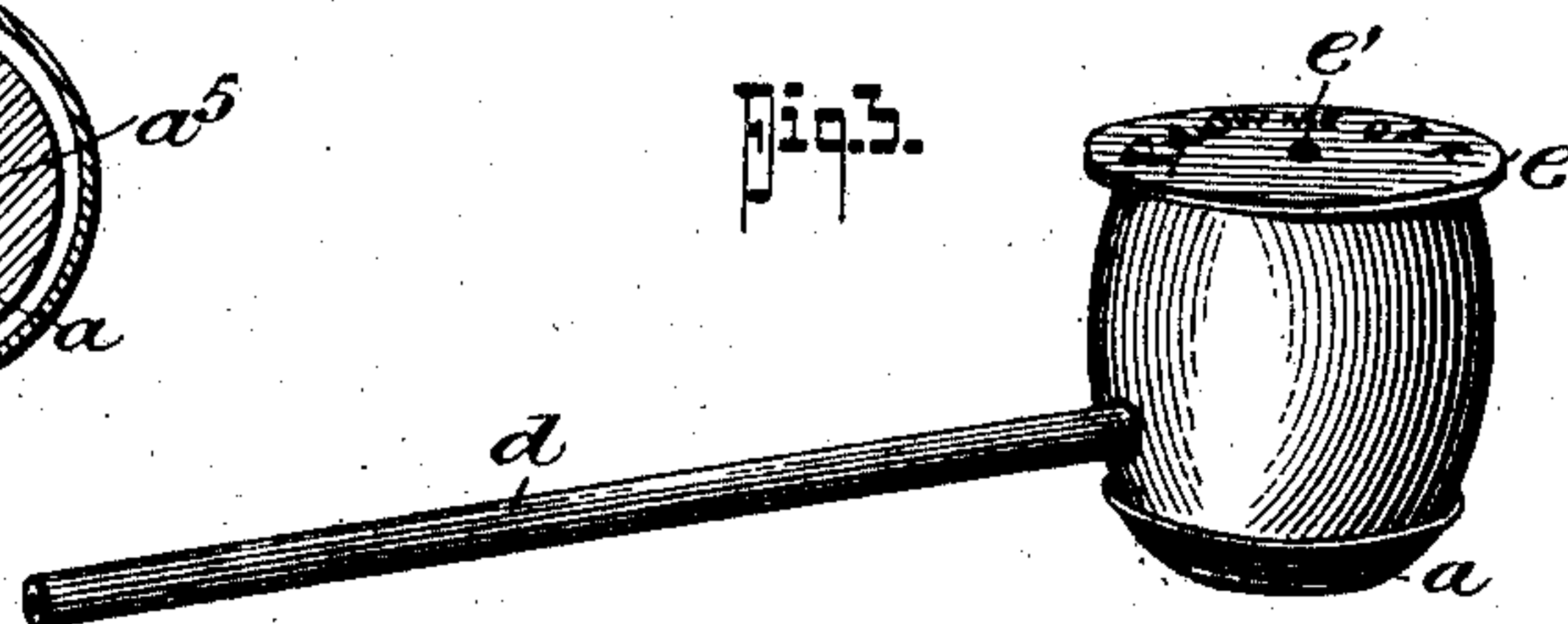
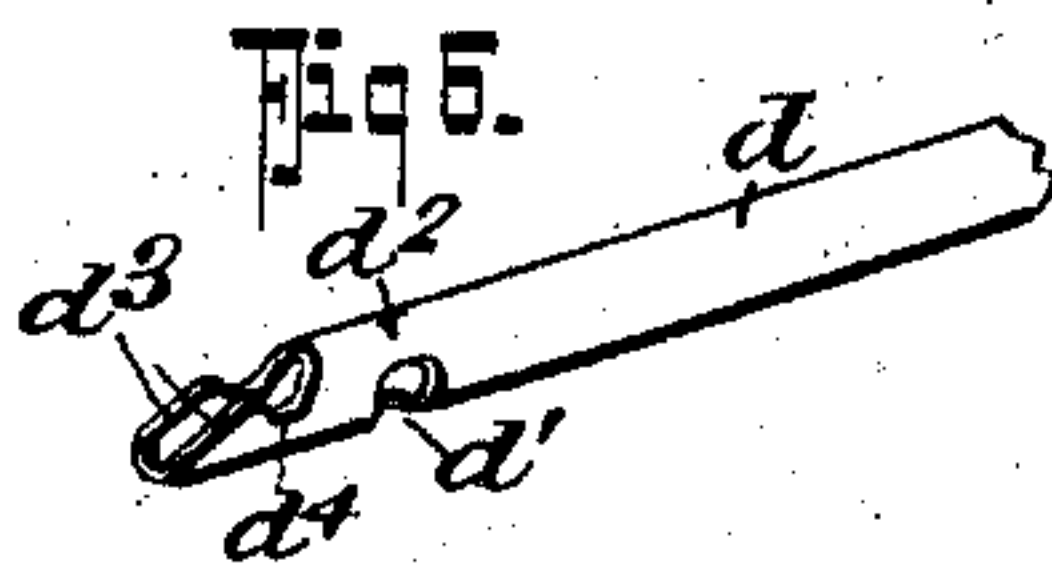


Fig. 3.



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TRICK-PIPE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRED I. JUDSON, residing at Houston, in the county of Harris and State of Texas, have invented a new and
5 Improved Trick-Pipe, of which the following is a specification.

This invention has for its object to provide a simple and interesting toy in the nature of a trick or puzzle pipe, having a lid loosely
10 supportable on the bowl, in such manner that under a proper adjustment of the blowing devices, it can be readily lifted or blown off, and which under another adjustment of the blowing devices will remain seated upon
15 the bowl as the user blows into the stem.

In its generic nature, my invention comprehends a body, preferably of the shape of a pipe bowl, that has a plurality of vertically extended air passages that discharge through
20 the bowl top, a lid adapted to rest on the bowl, and a blowing stem for cooperating with the air passages in the bowl, so that under a known adjustment it will direct the air blast against the lid with such force to
25 lift or blow it off, and when adjusted to the "trick" or unknown (to the user) position it will direct the air against the lid in such manner as to create a reduction of the atmospheric pressure between it and the
30 bowl top so it will remain seated thereon by suction, even when the bowl is inverted during the blowing operation.

It its more complete nature, my invention embodies a bowl shaped body having a
35 central or main air passage and a supplemental air passage that discharges through the top of the centrally balanced lid, adapted to rest loosely upon the bowl, and a blowing stem having its ejecting end so shaped
40 whereby, under one adjustment it will direct the air through the central air passage in a whirling direction and in such manner against the lid that it will discharge laterally from under the lid and creating, as it were, a
45 reduction of atmospheric pressure between the bowl and the lid, thus holding the lid, by suction, from blowing off, and when adjusted to another adjustment it will direct the air through the air passages under its full
50 force against the lid and lift or blow the same from the bowl, invisible supplemental means being also provided for closing off a direct blast against the lid.

In its more subordinate features, my invention consists in certain details of construction and novel combination of parts, all

of which will be hereinafter fully described and pointed out in the appended claims and illustrated in the accompanying drawings, in which:—

Figure 1, is a view that illustrates the manner in which the lid is blown off when the parts are adjusted as shown in Fig. 4. Fig. 2, is a similar view that shows the direction of discharge of the blast when the parts
60 are in the position shown in Fig. 5. Fig. 3, is a perspective view of my trick pipe. Fig. 4, is a longitudinal section thereof, the blowing stem and the supplemental valve device being adjusted to provide the lid for blowing
65 it off. Fig. 5, is a view similar to Fig. 4 showing the position of the parts when arranged so that the lid will not be blown off. Fig. 6, is a detail view of the discharge or valve end of the blowing stem. Fig. 7, is a
70 horizontal section on the line 7—7 on Fig. 4.

In carrying out my invention, I make the parts to resemble the ordinary straight stem pipe, and for economy of manufacture the bowl or body portion is of wood, turned to
80 shape and which is ornamented by an outer casing or jacket of sheet spring metal, which is secured at the upper end to the bowl and is bowed or curved outwardly from the bowl shaped body for a purpose presently explained.

The bowl *a* is formed with a straight bore *a'* of uniform diameter, which is hereinafter termed the main air passage, and it also has a supplemental bore or air passage *b* of smaller
90 diameter than the main bore *a'* and which with the main bore discharge through the top of the bowl as clearly shown in Figs. 4 and 5, by reference to which it will also be seen that the main and supplemental air
95 passages communicate with the transversely disposed bore *c* that receives the end of the blowing stem *d*, formed of bamboo or other suitable material.

e designates a lid of any light material, 100 that has a diameter sufficient to cover the air passages in the bowl, and preferably slightly greater than the diameter of the bowl top.

To balance the lid on the top, for preventing the lid accidentally slipping endwise of
105 the top and also for aiding in breaking up a direct air blast through the main air passage, whereby to cause the air to whirl within said passage as it passes to the exit of the said passage *a'*, the said lid is centrally weighted
110 by a pendent member *e'* which may be a pin or long stud inserted through the top of the

lid, and which is of sufficient length to extend some distance down into the central air passage a' .

The blowing stem d , the construction of the discharge end of which forms an essential feature of my invention, at a point near its discharging end has an outlet d' which when the stem is inserted in the bowl as shown in Figs. 4 and 5, when turned to one position, see Fig. 4, registers with the supplemental air passage b , for directing the main air blast through the said passage b , as indicated in Fig. 4, and against one edge of the lid and under sufficient force to lift the said lid, and when turned to the position shown in Fig. 5 to move out of register with the said passage b which is then closed by the solid portion d^2 of the stem as clearly understood from Fig. 5. That portion of the stem beyond the outlet d' and diametrically opposite the said outlet is cut out longitudinally to form a long discharging port d^3 and the inner end of which is increased in depth at opposite sides as at d^4 , the purpose of which will presently appear.

The transverse or stem receiving passage in the bowl extends beyond the main air passage a' to form a seat a^5 for the inner end of the stem, as shown in Fig. 5, by reference to which it will be seen that when the stem is turned to close off the supplemental air passage b , the long channel or port d^3 will register with the main passage a' to direct the full air blast into the said passage a' and against the seat a^5 which forms the inner end of a pocket and causes the air blast to ascend through the said passage in a whirl as indicated in Fig. 5 thus preventing the blast to ascend in a direct stream against the lid, a direct stream of air through the said passage being also partly prevented by the central pin or weight that extends down centrally of the said passage.

By forming the end of the stem as shown and described, it acts as a valve for controlling the air blast through the stem, since when adjusted as shown in Fig. 4 its outlet port d' is in open communication with the supplemental air passage b and thus directs the main volume of the air against the lid at one side of the center, thus breaking its equilibrium on the bowl and lifting or blowing it off, the action of blowing off the lid being augmented by reason of part of the blast passing up the main passage a' in two streams that pass through the side discharges d^4 , see Figs. 4 and 7 of the long port d^3 , it being understood that as the air passes from the ports d^4 in two distinct streams directly into the main passage a' and not into the pocket a^5 there will be no whirling action and no consequent decrease of the air pressure under the lid as is the case when the ports are adjusted as in Fig. 5.

As a further means for cutting off the di-

rect air discharge against the lid, I have shown an automatically closed valve f in the nature of a slide that works in a socket a^6 and which has a single air port f' . This valve is fastened at the outer end to the spring metal jacket, which, as it assumes its normal shape, draws the slide valve in position as shown in Fig. 5 and closes the passage b . This valve is more especially intended to close off the passage b when the first user forgets to adjust the stem when handing the "trick" to another, and also making it more difficult to solve since to enable one to blow off the lid the valve f must be adjusted as well as the stem, the former being adjusted to the open position by pressing against the jacket c as shown in Fig. 4.

My invention will be especially interesting as a trick, since the average user will be unable to understand why the lid will not blow off even when the bowl is turned upside down as indicated by dotted lines on Fig. 5.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

1. In a trick pipe, a body having two air passages combined with a lid loosely supported over said body to cooperate with the air passages thereof, together with an adjustable air blowing means for forcing air through one of said passages under one adjustment and through both of said passages under another adjustment.

2. A device of the character described, comprising a body having a main and a supplemental air passage that opens through the top, a lid supportable on the top over the air passages, an adjustable blowing stem having means under one adjustment for directing the air blast in a whirl through the main air passage against the under side of the lid and closing the supplemental passage and when under another adjustment to discharge the air current directly through the main and supplemental passage against the lid.

3. A device of the character described, that comprises a body having a central or main air passage and the supplemental air passage, and a transverse passage that communicates with the said air passages, a lid supportable on the body over the said air passages, and a blowing stem insertible in the transverse passage whereby to project the end of said stem below the lower end of the main passage, the said projected end of the stem having means for dividing the air current blown through the said main pipe, whereby to divide the air blast that passes up the main air passage, said stem having an outlet port adapted for registering with the supplemental air passage in the body, for the purposes specified.

4. In combination with a pipe bowl having a central or main air passage and a supplemental passage, and having a transverse

socket that extends inwardly from one side of the body, and communicating with said passages, a lid loosely supported over the air passages, said socket extending beyond the main passage, adjustable blowing means for directing air into the socket and through the main air passage only, under one adjustment and for directing air through the supplemental and the main passages under another adjustment.

5. A trick device that comprises a body having a transversely disposed air inlet, a main air passage and a supplemental air passage that open through the top and communicate with the air inlet and a lid loosely supportable on said body, and a blowing tube for co-acting with the two air passages in the body, having an inlet for registering with the supplemental passage and a portion for partially closing off the main passage when the stem is turned to open the supplemental passage, said stem having means for deflecting the air current into two streams as they pass into the main passage.

6. A trick pipe comprising a bowl having a central main air passage and a supplemental air passage at one side, said passages discharging through the top, and a transverse socket that communicates with the lower end of both air passages and extends beyond the central passage, and a lid adapted to rest loosely on the bowl, said lid having a central portion for extending into the main passage; in combination with a hollow stem, adapted to be inserted in the transverse socket in the bowl, said stem having a discharge aperture adapted for being brought into register with the supplemental air passage and a longitudinal port at the outer end, extended beyond the main passage and adapted for registering with the main passage, said longitudinal port having its portion of greatest area to register with the main air passage.

7. In a trick pipe of the character described, the combination with a bowl having air passages a' and b opening through the top and a transverse pocket c in communication

with the passages a' and b ; of a lid e , a hollow stem d having ports d' — d^3 , said stem having cut-away portions d^4 merging with the ports d^3 , and means for normally holding the passage b closed, said last named means being manually operable to open said passage b .

8. The combination with the bowl a having the main and supplemental air passages a' — b respectively, opening through the top and the transversely extended socket c communicating with said passages, of a lid e having a central pendent member e' to project into the air passage a' , a hollow stem having discharge ports d' and d^3 to cooperate with the passages b and a' respectively, a resilient jacket surrounding said bowl, an apertured slide valve having a passage and connected with the jacket and normally held to close the passage b , substantially as shown and described.

9. In a trick pipe, a body having a main and a supplemental air passage opening through the top and an air inlet passage communicating therewith of an adjustable air blowing means for forcing air through one of said passages only under one adjustment and through both of said passages under another adjustment, and a lid loosely held over said body to cooperate with the air passages thereof.

10. A device of the character stated comprising a body having two independent air discharging passages and an air inlet that communicates with said passages, a lid loosely supportable on the body over the air passages and an adjustable blowing stem apertured so as, in one position, to open communication between the air inlet and both passages, and in another position to close one of said passages whereby air may be either directed in a whirl against the under side of the lid to reduce the atmospheric pressure thereunder or to increase said pressure.

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Witnesses:

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