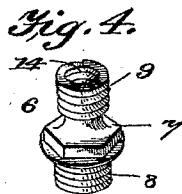
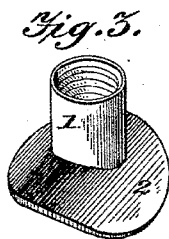
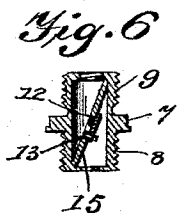
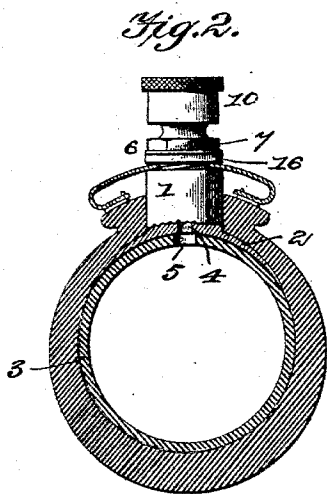
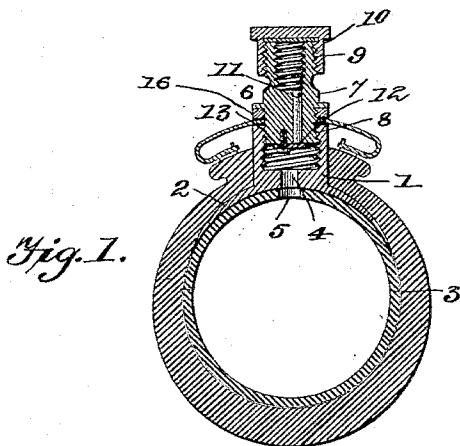


(No Model.)

J. SCHIPKOWSKY.
AIR VALVE FOR PNEUMATIC TIRES.

No. 559,813.

Patented May 12, 1896.



Inventor
Julius Schipkowski

Witnesses

E. H. Monroe

By his Attorneys.

J. H. Riley

C. A. Snow & Co

UNITED STATES PATENT OFFICE.

JULIUS SCHIPKOWSKY, OF SOUTH MILWAUKEE, WISCONSIN, ASSIGNOR OF
ONE-HALF TO W. P. HATCH, OF SAME PLACE.

AIR-VALVE FOR PNEUMATIC TIRES.

SPECIFICATION forming part of Letters Patent No. 559,813, dated May 12, 1896.

Application filed September 29, 1894. Serial No. 524,491. (No model.)

To all whom it may concern:

Be it known that I, JULIUS SCHIPKOWSKY, a citizen of the United States, residing at South Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Air-Valve for Pneumatic Tires, of which the following is a specification.

The invention relates to improvements in air-valves for pneumatic tires.

10 The object of the present invention is to improve the construction of air-valves for pneumatic bicycle-tires, and to provide a simple and inexpensive one which will possess great strength and durability, and which will
15 not be liable to be broken and which will afford ready access to its parts.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated
20 in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a longitudinal sectional view of an air-valve constructed in accordance with this invention. Fig. 2 is a
25 side elevation of the same. Fig. 3 is a detail perspective view of the valve-casing. Fig. 4 is a similar view of the valve-tube. Fig. 5 is a detail perspective view of the cap. Fig. 6 is a sectional view of a valve-tube, illustrating
30 a modification of the invention.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates an interiorly-threaded valve-casing having a solid inner end and provided
35 at that point with a concavo-convex flange or plate 2, adapted to be secured to an inner tube 3 of a pneumatic tire; but it is adapted to be readily applied to any ordinary form of pneumatic tire whether employing an inner
40 tube or not. The solid inner end of the valve-casing is provided with a perforation 4, which registers with a corresponding opening 5 in the inner tube 3, and the concavo-convex
45 flange is attached to the exterior of the inner tube 3 and surrounds the opening 5 thereof.

The interiorly-threaded valve-casing receives the inner portion of a valve-tube 6, which is provided with an exteriorly-arranged
50 polygonal portion 7, forming a valve-seat, and is threaded at opposite sides of the same, the inner portion 8 corresponding to and

screwing within the interiorly-threaded valve-casing, and the outer threaded portion 9 receiving an interiorly-threaded cap 10. The inner end of the valve-tube is solid and is provided with a perforation or air-passage 11, which is normally closed by a flap-valve 12, the inner end of the valve-tube forming a seat for the same. The valve 12 may be constructed of leather, rubber, or other suitable
60 flexible material, and it is secured to the inner end of the valve-tube by a screw 13, whereby it may be readily removed when worn, and a new valve may be readily supplied.

The outer end of the valve-tube is interiorly threaded at 14 for the attachment of a pump for inflating the tire, and after such inflation the tube has its outer end covered by the cap to exclude dust and dirt and other extraneous
70 matter, whereby the valve is maintained perfectly clean and is prevented from leaking. The inner portion of the valve-tube is preferably provided with a washer 16, of leather or other suitable material, to be interposed
75 between the shoulder formed by the wrench-seat and the outer end of the valve-casing to prevent leakage.

Instead of forming the valve-seat at the inner end of the valve-tube, the latter may be
80 provided with an inclined diaphragm 15 for forming a seat; but the solid lower portion of the valve-tube provides a strong and durable horizontal diaphragm or seat.

It will be seen that the air-valve for pneumatic tires is exceedingly simple and inexpensive in construction, that it is strong and durable and is not liable to get out of order. It will also be apparent that it is capable of being readily applied to any ordinary form of
90 pneumatic tire, and that ready access may be had to its parts.

In assembling the parts and applying the same to the tire and rim of a wheel the valve-casing 1 extends through an opening in the
95 inner side of the envelop or jacket of the tire and bears against the outer side of the rim, and the valve-tube 6 has its threaded end 8 passing through an opening in the rim and screwed into the valve-casing 1, the said
100 rim being clamped between the end of the valve-casing 1 and the exterior portion 7 of

the valve-tube, thereby providing a substantial joint between the component parts of the valve and the rim and pneumatic tire. As a result of this construction and disposition of the parts, in the event of a puncture the valve-tube can be quickly removed and the air permitted to escape rapidly, the inner tube being prevented from creeping and the valve held steady without the use of an extra nut or other staying means.

The perforation or air-passage 11 is located to one side of the longitudinal center of the valve-tube 6, thereby making provision for the attachment to the valve-tube of the flap-valve 12, so that the latter can operate to admit of the ingress of the air and close upon its seat to prevent the egress of the air contained within the tube.

What I claim is—

In a pneumatic-tired wheel, the combination with the rim and the tire, of a valve-casing having a concavo-convex plate at its inner end fitted to the inner tire and coming

between the same and the enveloping-jacket, the outer end of the valve-casing bearing against the outer side of the rim, a valve-tube having exteriorly-threaded end portions and an intermediate exterior polygonal flange, and having one end portion screwed into the valve-casing and clamping the rim between the end of the valve-casing and the said polygonal flange, said valve-tube having a longitudinal eccentric air-passage and a threaded opening in its outer end communicating with the said air-passage, a flap-valve at the inner end of the valve-tube for closing the air-passage, and a cap for closing the outer end of the valve-tube, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

J. SCHIPKOWSKY.

Witnesses:

E. B. INGALLS,

LOUIS G. BAKER.