July 7, 1959 J. R. BAILEY 2,893,165

MORSE CODE BALLOON SIGNALING DEVICE

Filed Aug. 24, 1955

Fig. 1.

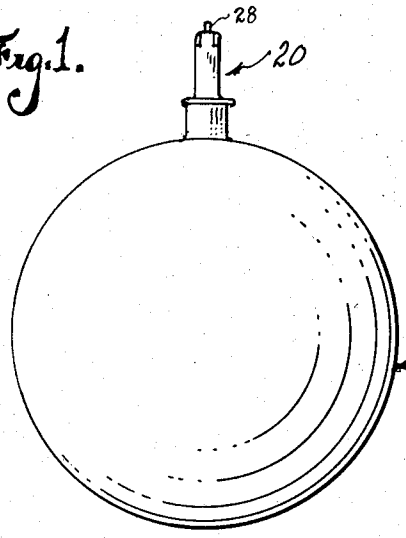


Fig. 2.

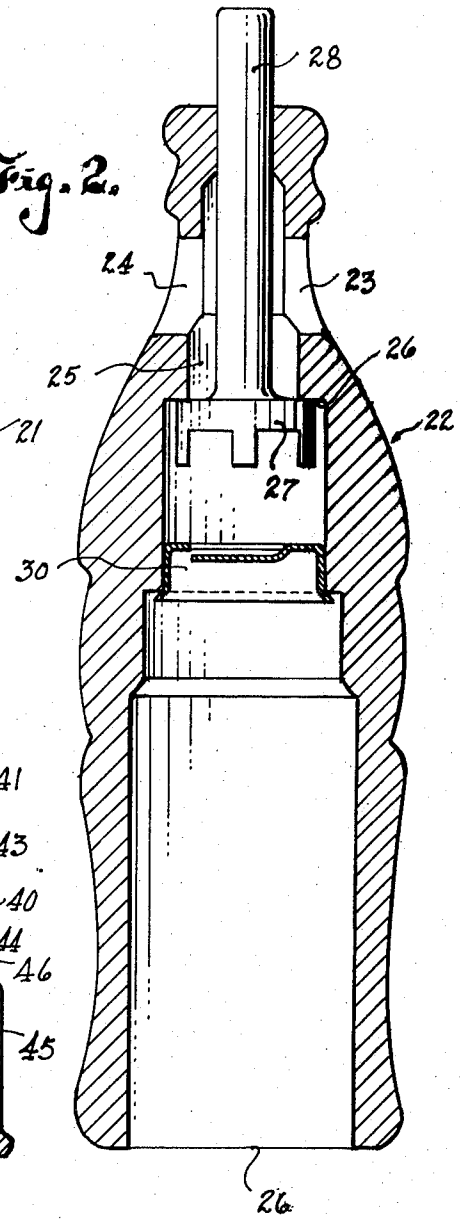


Fig. 3.

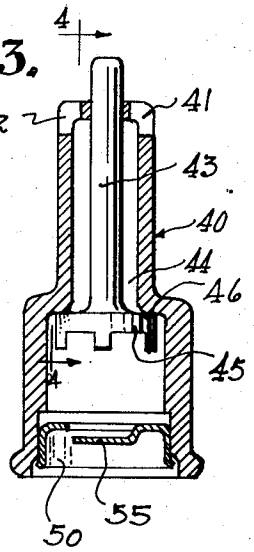


Fig. 4.

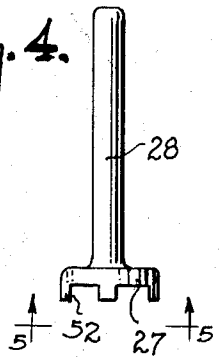
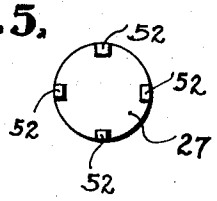


Fig. 5.



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MORSE CODE BALLOON SIGNALING DEVICE

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2 Claims. (Cl. 46—88)

This invention relates, in general, to signaling devices, and is particularly concerned with a toy Morse code balloon signaling device adapted for advantageous employment in practice and instruction for children learning telegraphic codes.

Otherwise stated, the instant invention is concerned with a toy noise maker adapted for association with a conventional rubber balloon providing air power releasable by manual operation of a valve means to assimilate a da-dit noise corresponding to dots and dashes of the Morse telegraphic code.

An important object and accomplishment of the invention is to provide a simple signaling device for easy attachment to a balloon which provides a source of air for operation of a noise maker, the flow of air through the noise maker being controlled by a manually operable valve means incorporated in the signaling device.

Another important object and accomplishment of the invention is to provide a signaling device of simple construction adapted for incorporation into novelty items and having noise making means corresponding to dot-dash of the Morse telegraphic code.

Another object and accomplishment of the invention is to provide a signaling device of the character herein described which does not require the use of complicated or expensive mechanical parts, but which is made up of components simply and cheaply manufactured and assembled.

It is another important object and accomplishment of the present invention to provide a signaling device as described herein which is economical to manufacture and yet rugged and reliable in use without the requirement of service or care.

An ancillary object and accomplishment of the invention is to provide a new and improved signaling device which is adapted to be economically manufactured and which is so designed as to permit the manufacture and assembly thereof in accordance with present day large scale mass production manufacturing methods of construction and assembly.

The invention seeks as a final object and accomplishment to provide a signal device of the character indicated and which is particularly characterized by a design arrangement to more advantageously and satisfactorily perform the functions required of it and adapted to provide a compact unit which will successfully combine the factors of structural simplicity and durability and yet be economical to manufacture.

Additional objects, features and advantages of the invention disclosed herein will be apparent to persons skilled in the art after the construction and operation are understood from the within description.

It is preferred to accomplish the various objects of this invention and to practice the same in substantially the manner as hereinafter more fully described, and as more particularly pointed out in the appended claims.

Embodiments of the invention are illustrated in the accompanying drawings forming a part hereof and wherein:

Fig. 1 is an elevational view of the signaling device contemplated by this invention and shown in an operative position having attached thereto a balloon;

Fig. 2 is an enlarged sectional view of one embodiment of the invention;

Fig. 3 is a sectional view of another embodiment of the signaling device contemplated by this invention;

Fig. 4 is an elevational view of the valve stem contemplated by this invention and being taken substantially on the plane of the line 4—4 in Fig. 3, and

Fig. 5 is a bottom plane view of the valve stem depicted in Fig. 4 and being taken substantially on the plane of the line 5—5 in Fig. 4.

The drawings are to be understood to be more or less of a schematic character for the purpose of illustrating and disclosing typical or preferred forms of the improvements contemplated herein, and in the drawings like reference characters identify the same parts in the several views.

In the exemplary embodiment of the invention depicted in Fig. 1 the signaling device with which the invention is particularly concerned is designated in its entirety by the numeral **20** and is shown with a rubber balloon **21** affixed thereto. The rubber balloon **21** is shown in its "blown-up" position to provide a source of air under pressure effective to operate the signal device **20** as hereinafter described.

Attention is invited to Fig. 2 wherein there is shown one embodiment of the signal device contemplated by this invention which comprises a casing **22** shown in this instance as having the configuration of a soft drink bottle, but it is to be understood that any shape or configuration may be employed. The casing **22** is provided with air inlet openings **23** and **24** in open communication with an air passage **25** which continues axially through the casing and terminates in an opening **26** in open communication with the interior of the balloon **21**.

In the air passage **25** there is provided a valve seat **26** arranged for engagement with head portions **27** integrally formed with a valve stem **28**, the uppermost portions of which project outwardly of the casing **22**. The valve stem **28** and the head **27** attached thereto is arranged for axial movement in the passage **25** responsive to manual pressure at the upper regions of the valve stem **28** effective to cause unseating of the head **27** from the valve seat **26** to permit air to pass by the valve.

Disposed in the air passage and in the path of the air passing through the air passage **25** there is provided a conventional single reed noise maker **30** press fitted and confined in the position as shown.

A balloon as at **21** may be attached to the casing **22** as shown in Fig. 1 and the upper regions of the casing **22** are placed in the mouth of the operator and the balloon is blown up by air forced through the openings **23** and **24** and into the air passage **25** where the air pressure will cause axial movement of the valve stem **28** downwardly to unseat the valve and permit air to pass thereby down through the lower regions of the casing and out of the opening **26** and into the balloon. When the air pressure of the inwardly flowing air is stopped the valve will automatically seat itself and prevent further escape of air. The device is now ready for operation. The operator manually exerts pressure on the upper regions of the valve stem **28** permitting the release of the air from the balloon which, when passing through the noise maker **30**, causes a da-dit sound depending on the speed of manual operation of the valve stem **28** by the operator. In this way the operator may assimilate dot-dash sounds of the Morse telegraphic code with the dash being the longer stroke while the dot being a short, sharp application of manual pressure to the valve stem.

After all of the air is released from the balloon, it may

be blown up again to repeat the operations. In this manner children may signal each other without the requirement of expensive electrical devices and may advantageously learn the Morse telegraphic code.

Attention is invited to Fig. 3 showing substantially the same construction and principles of operation of the signaling devices depicted in Fig. 2, but a simple form of casing is provided. In Fig. 3 the casing **40** is provided with air inlet openings **41** and **42**, a valve stem **43** disposed in an air passage **44**, said valve stem having integrally formed therewith a valve head **45** adapted for engagement with a valve set **46**.

Disposed in the lower regions of the casing **40** and in the air stream is a noise maker **50** of the same general construction as the noise maker **30** shown in Fig. 2.

In Fig. 4 it can be seen that the valve stem **28** and particularly the head **27** thereof is provided with four depending legs **52** which are adapted to engage the upper wall of the noise maker **30** or **50**, as the case may be, responsive to axial movement of the valve stem, these legs providing openings permitting the passage of air around the head **27** so as not to interfere with the operation of the reed **55** of the noise maker when the valve is in its open position.

Although I have shown and described a single unit signaling device, it is obvious that a multiple unit signaling device may be made employing the same general principles of construction and operation as herein described whereby multiple valve and noise maker assemblies are disposed in a unitary casing and each such assembly may be designed to give a different tone.

From the foregoing disclosure, it may be seen that I have provided an improved signaling device which efficiently fulfills the objects thereof as hereinbefore set forth and which provides numerous advantages which may be summarized as follows:

(1) Structurally simple, efficient and durable;

(2) Economical to manufacture and readily adaptable to mass production manufacturing principles; and

(3) The provision of a simple signaling device for easy attachment to a balloon which provides a source of air for operation of a noise maker, the flow of air through the noise maker being controlled by a manually operable valve means incorporated in the signaling device operable to assimilate a da-dit noise corresponding to dots and dashes of the Morse telegraphic code.

While I have illustrated preferred embodiments of my invention, many modifications may be made without departing from the spirit of my invention, and I do not wish to be limited to the precise details of construction set forth, but wish to avail myself of all changes within the scope of the appended claims.

I claim:

1. A toy signaling device to which a toy balloon may be attached to provide a source of air under pressure, said signaling device comprising a casing having means defining an air passageway adapted to be in open communication with said attached balloon, valve means comprising a plate normally engageable with a seat in said air passageway and operable to permit air entry into said balloon responsive to manual blowing but normally preventing escape of air from said balloon, said valve means being normally maintained in a closed position responsive to air pressure in said balloon, said valve means having a stem with one end thereof fixedly attached to said plate and the other end thereof projecting outwardly of said casing, said stem being manually movable axially in said air pasasgeway whereby said valve means may be manually operated by movement of said stem inwardly of said casing to move said plate from said seat to permit escape of air from said balloon through said air passageway, and a noise maker disposed in said air passageway and in the path of escaping air and operable to permit a da-dit noise assimilating dots and dashes of a telegraphic code controlled by the manual operation of said valve means.

2. In a toy signaling device to which a toy balloon may be attached to provide a source of air under pressure, the combination with a casing having means defining an air passageway adapted to be in open communication with said attached balloon, of valve means defining a plate normally engageable with a seat in said air passageway and operable to permit air entry into said balloon responsive to manual blowing but normally preventing escape of air from said balloon and being normally maintained in a closed position responsive to air pressure in said balloon, a stem with one end thereof fixedly attached to said valve means and the other end thereof projecting outwardly of said casing and manually movable axially in said air passageway whereby said valve means may be manually operated by movement of said stem inwardly of said casing to move said plate from said seat to permit escape of air from said balloon through said air passageway, and a noise maker disposed in said air passageway and in the path of escaping air and operable to permit a da-dit noise assimilating dots and dashes of a telegraphic code controlled by the manual operation of said valve means.

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