May 3, 1927.

F. A. BROWN

1,626,913

SIGNAL

Filed April 23, 1923

Fig. 1.

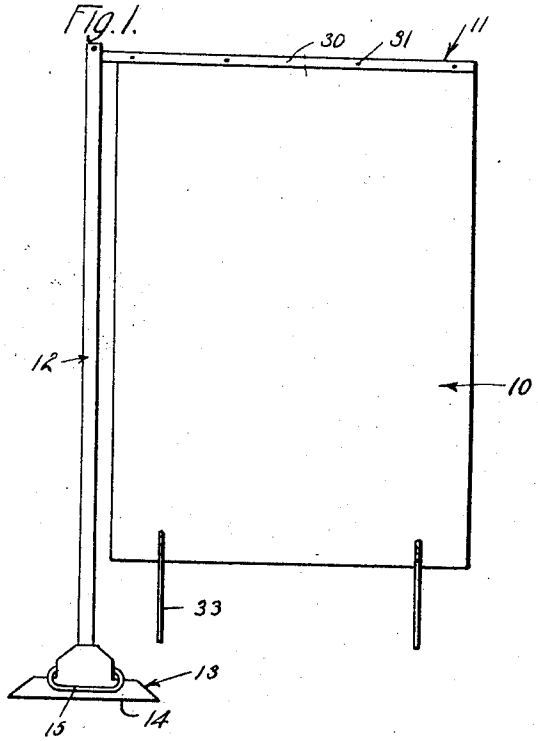


Fig. 2.

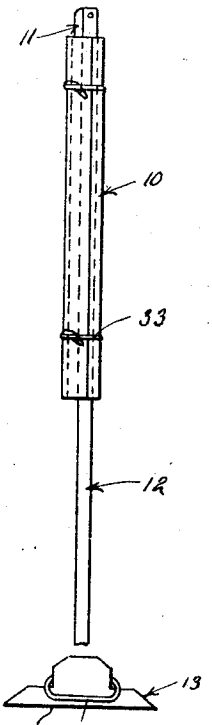


Fig. 3.

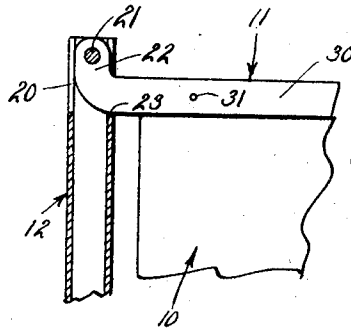


Fig. 4.

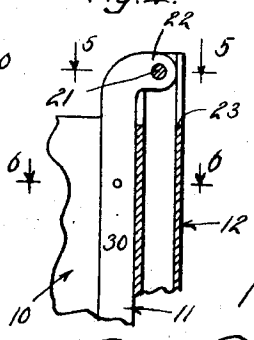


Fig. 5.

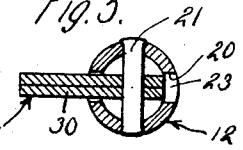


Fig. 6.

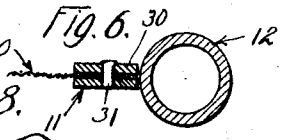


Fig. 8.

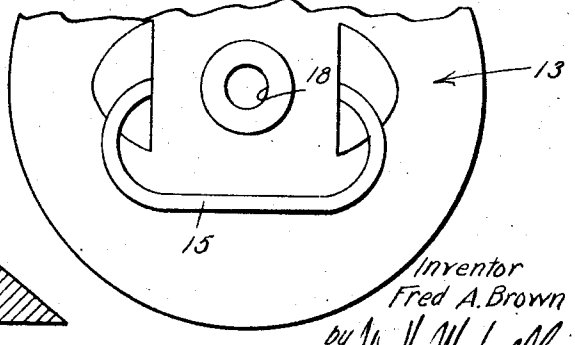
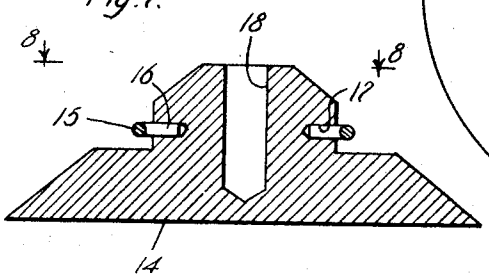


Fig. 7.



Inventor
Fred A. Brown
by W. H. Maxwell
his Attorney

Patented May 3, 1927. 1,626,913

UNITED STATES PATENT OFFICE.

FRED A. BROWN, OF LOS ANGELES, CALIFORNIA.

SIGNAL.

Application filed April 23, 1923. Serial No. 634,167.

This invention has to do with a signal, and has particular reference to a danger or warning signal of the general character used by workmen, where work is being carried on, etc.

Warning or danger signals are commonly used where men are at work or where there is danger, for instance, where construction work, or the like, is going on. These signals are usually flags, and, in most cases, simply comprise a piece of cloth, or the like, carried on a straight standard which is adapted to be driven into the ground. This ordinary simple type of signal is in many instances insufficient in that the cloth or signal part is not carried in a manner so that it is conspicuous. Various more complicated forms of signals of this general character have not been satisfactory in practice, in that they are inconvenient for the workmen to handle and, therefore, often not used when they should be, or are cumbersome and inconvenient to transport from place to place.

It is an object of this invention to provide a signal device which is particularly effective and in which the signal part is carried so that it is particularly conspicuous.

Another object of my invention is to provide a signal which is particularly effective and which is simple in construction and particularly convenient to handle and transport.

The various objects and features of my invention will be best and more fully understood from the following detailed description of a typical preferred form of the invention, throughout which reference is had to the accompanying drawings, in which:

Fig. 1 is a view showing the signal assembled and in operating condition;

Fig. 2 is a view showing the signal collapsed and in condition for transportation or handling;

Fig. 3 is an enlarged detail sectional view of the joint construction between the standard and arm, showing the arm in the extended position with relation to the standard;

Fig. 4 is a view similar to Fig. 3, showing the arm folded in with relation to the standard;

Fig. 5 is an enlarged sectional view, being a view taken as indicated by line 5—5 on Fig. 4;

Fig. 6 is an enlarged sectional view, being a view taken as indicated by line 6—6 on Fig. 4;

Fig. 7 is a detail sectional view of the base; and

Fig. 8 is a plan view of the base, being a view taken as indicated by the line 8—8 on Fig. 7.

The signal provided by my invention, includes, generally, a signal part 10; an arm 11, which carries the signal part 10; a standard 12, which carries and supports the arm 11; and a base 13, adapted to carry the standard 12. The base 13 is, in accordance with the present invention, a comparatively heavy part; for instance, a casting, and is preferably formed with a comparatively wide base 14. In practice the base can be conveniently made in the form of a cone, as I have illustrated throughout the drawings, as this form has been found to be particularly effective and sightly. I provide the base 13 with a handle 15, to facilitate its being handled. In the preferred form of construction, the handle 15 is in the form of a loop, having its ends 16 rotatably carried in openings 17 which extend into the sides of the base at substantially diametrical opposite points. This particular form of construction is extremely simple, and allows the handle 15 to swing relative to the base and to lie close to the base when not in use.

The standard 12 may be, and preferably is, a plain straight member, for instance, a piece of pipe, or the like, of the desired length. In accordance with the broader aspects of my invention, the standard may be connected with the base 13 in various manners, it being preferred, however, that it be detachable from the base and that it be mountable on the base in a simple and convenient manner. I have found it most desirable to mount the standard on the base 13 by forming a hole or socket 18 in the top of the base to slidably receive the lower end of the standard 12. In practice the hole 18 may be drilled or other-

wise formed in the base, it being desirable, of course, to form it sufficiently deep so that it will firmly hold the standard. I have referred to the standard 12 as being a piece of pipe, or the like, as a pipe makes a durable and rigid construction, and is considerably lighter than a solid rod would be.

The arm 11, which carries the signal 10, is, in accordance with my invention, pivotally connected with the upper end of the standard 12 so that it is movable to a position where it extends horizontally from the standard, as I have illustrated in Fig. 1, and to a position where it extends parallel to the standard 12, as I have illustrated in Fig. 2. In accordance with the preferred form of my invention, I form a notch 20 in the upper end of the standard 12 to receive the inner end portion 22 of the arm 11. The arm is pivotally connected with the standard by a pivot pin 21, in the manner clearly illustrated in Figs. 3, 4, and 5 of the drawings. The inner end portion 22 of the arm 11 is turned at right angles to the rest of the arm, so that the arm is pivotally connected with the standard about a transverse axis spaced from the longitudinal axis of the arm. The axis of the pivot pin 21 is off-set sufficient from the longitudinal axis of the arm 11 so that the arm can be swung to a position where its longitudinal axis is parallel with the standard 12 and where it lies close to the standard 12. In practice the axis of the pivot pin 21 is off-set just sufficient so that the arm 11 will lie close against the standard 12 when it is folded in, as clearly illustrated in Figs. 2 and 4 of the drawings. In accordance with my invention, stop means is provided for supporting the arm 11 in the out or extended position, as illustrated in Figs. 1 and 3 of the drawings. In practice it is most desirable to proportion the depth of the notch 20 in the top of the standard 12 to the arm 11 and pivotal connection between the arm and standard so that the bottom 23 of the notch forms a shoulder or stop which supports the arm. The manner in which the bottom 23 of the notch 20 supports the arm is clearly illustrated in Fig. 3 of the drawings. From inspection of the drawings, and from the foregoing description, it will be readily understood how the arm 11 can be easily swung over the top of the standard 12 between the extended position where it is supported by the bottom 23 of the notch 20 and the folded position where it lies against the side of the standard.

The signal part 10 may be of any suitable material, for instance, it may be a piece of cloth—preferably red cloth—and may be attached to the arm 11 in any suitable manner so that it hangs downwardly therefrom when the arm is extended. In the particular form of construction illustrated in the drawings, the arm 11 is formed of two parts 30 adapted to be held or clamped together by suitable screws or rivets 31 so that they grip the upper edge of the signal 10 in the manner clearly illustrated in Figs. 1 and 6. It will be obvious, of course, that the signal part 10 may be made of the desired proportions with relation to the other parts of the device, and that it may be colored or marked in any desired manner. The signal part 10 may be provided with tabs 33 so that it can be tied when wrapped around the arm and standard, in the manner hereinafter described.

When the device is in use the standard 12 is mounted on the base 13 and the arm 30 is arranged in the extended or horizontal position where the signal part 10 hangs downwardly from it. It will be obvious, of course, that the signal part 10 in hanging downwardly from the arm 30 is particularly conspicuous and effective as a signal. When it is desired to take the device out of use it is folded and taken apart by swinging the arm 30 from the horizontal or extended position to the folded position, wrapping the signal part 10 around the arm and standard and then securing it by means of the tabs 33, as I have illustrated in Fig. 2, and removing the standard from the base. When the device is thus folded and taken apart it presents only two parts to be handled, both of which are simple and compact and convenient to handle. In fact, my present invention provides a device which is very little more cumbersome and inconvenient to handle than the ordinary simple signal formed by a signal part carried on a stake, and is infinitely more effective and reliable than the ordinary simple form of signal, or any other signal herebefore commonly used. It has been found in practice that the device provided by this invention can be easily and quickly handled and that it is sufficiently simple and convenient that workmen will use it wherever possible.

Having described only a typical preferred form of my invention I do not wish to limit myself to the specific details hereinabove set forth but wish to reserve to myself any changes or variations that may appear to those skilled in the art or fall within the scope of the following claim.

Having described my invention I claim:

A danger signal including a base, a standard adapted to be detachably mounted on the base, an arm having an offset part at one end, a pin pivotally connecting the offset part of the arm to the upper end portion of the standard whereby the arm is movable between a position where its main part is parallel with the standard and a position where its main part extends laterally from the standard, the standard being formed with a notch which receives the offset part of the arm and which forms a shoulder in the

standard to engage the main part of the arm and support it in the last mentioned position, a signal part carried by the arm, the signal part being of flexible material and carried by the arm to hang therefrom when the arm is in the last mentioned position and to wrap around the arm and standard when the arm is parallel to the standard, and taps on the signal part for securing it when wrapped around the arm and standard.

In witness that I claim the foregoing I have hereunto subscribed my name this 31st day of March, 1923.

FRED A. BROWN.