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WIGWAG SIGNAL WITH MASK

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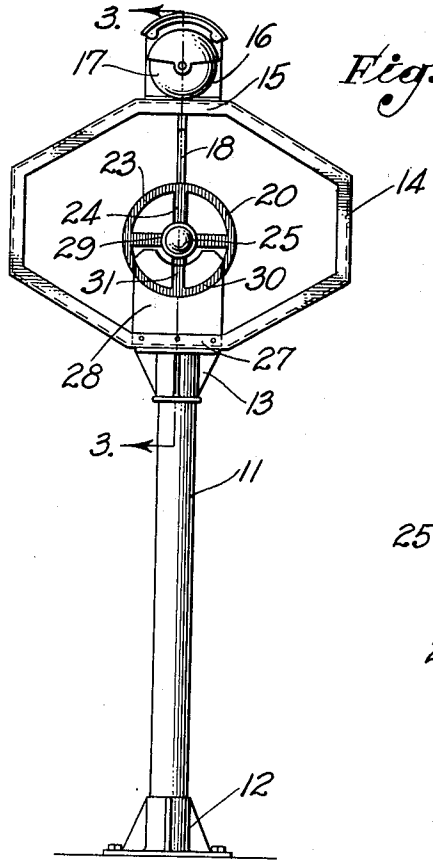


Fig. 1.

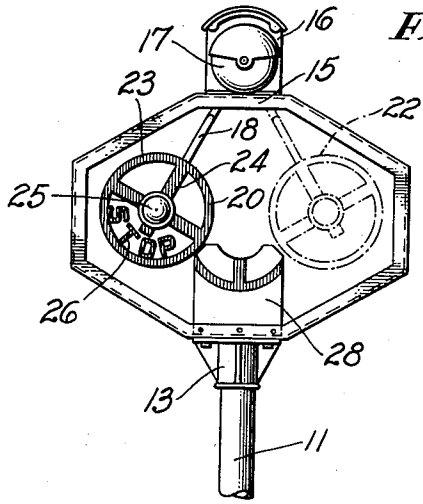


Fig. 2.

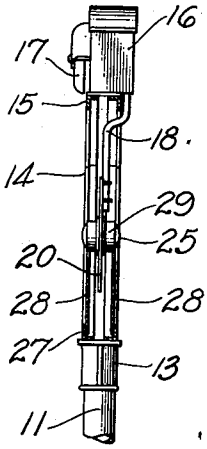


Fig. 3.

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WIGWAG SIGNAL WITH MASK

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3 Claims. (Cl. 177—329)

My invention relates to wigwag signals of the character employed at railroad crossings, and relates to a simple form of such signal in which the word Stop or similar symbols are obscured from view during the time the wigwag signal is at rest.

The ordinary type of wigwag signal includes a banner or target suspended by means of an arm from a reciprocating motor mechanism which is electrically actuated to produce a desired wigwag movement of the banner to advise traffic that a train is approaching. Another signal device has a banner which is held to one side of the space in which it swings, when the signal is not operating, and when the banner is in this position it is concealed by a shield set to one side of the space in which the banner swings during its wigwag movement in providing a danger signal.

It is an object of my present invention to provide a wigwag device in which the desirable results obtained by using a mask for obscuring the signal when it is in a position of rest may be obtained without the use of expensive mechanism for latching the signal banner in a retracted and obscured position. Accordingly, it is an object of the invention to provide a wigwag signal having a banner which moves back and forth to give a signal and when at rest assumes a position intermediate the extremes of its movement when in operation, this signal having characters thereon and a mask for obscuring the characters when the banner is in a position of rest, the characters being displayed to view when the banner is swung from one side to the other of the mask.

A further object of the invention is to provide a signal device of the above character in which the banner has markings thereon outlining a figure and in which the mask has markings corresponding to the part of the outline of the figure covered by said mask so that when the banner is in a position behind the mask, the markings of the banner and the mask will present to view the figure of the banner without the characters or word Stop being viewed.

Further objects and advantages of the invention will be brought out in the following part of the specification.

Referring to the drawing, which is for illustrative purposes only,

Fig. 1 is an elevational view showing a preferred form of my invention with the banner thereof in a position of rest.

Fig. 2 is an elevational view showing the manner in which the banner is swung for the purpose of giving the danger signal.

Fig. 3 is a cross section on a plane represented by the line 3—3 of Fig. 1.

The wigwag signal device shown in the drawing includes a standard 11 extending upwardly from a base 12 and having a casting 13 on its upper end which supports an open frame 14 preferably made from a structural section such as a structural channel. On the upper part 15 of the frame 14 a housing 16 is mounted, this housing having a bell 17 thereon and containing a motivating mechanism for swinging an arm 18 which projects downwardly from the housing 16 and has a circular banner 20 secured to its lower end. The motivating mechanism within the housing 16 may be of the type employing a pair of electromagnets which alternately attract an armature which is connected to the upper end of the arm 18, or the motivating mechanism may consist of a motor and crank connected to the upper end of the arm 18 so as to cause it to swing from the position of rest in which it is shown in Fig. 1 and back and forth as indicated in full lines and in dotted lines 22 in Fig. 2. As shown in Fig. 2, the banner 20 has lines or marks thereon forming figures on both sides thereof which may be colored red and consist of circles 23 with cross bars 24 extending radially. In the center of the banner 20 is a cylindrical housing 29 having bull's-eye lenses 25 at the ends thereof and containing an electric light for illuminating the bull's-eye lenses. On the lower portion of the banner 20 are characters or symbols, such as the letters 26 spelling the word Stop, on both sides of the banner 20, for advising or instructing the viewers of the operating signal device that a train is approaching the crossing at which the wigwag signal is situated and that a condition of danger exists for all persons who should attempt to cross the tracks at such time.

Secured to the lower part 27 of the frame 14 is a pair of plates or masks 28 which extend upwardly so as to lie adjacent and obscure the lower portion of the banner 20 when such banner is in its position of rest shown in Fig. 1. The upper part of each mask 28 has marks 30 and 31 thereon corresponding to the portions of the geometric figure of the banner 20 covered by the upper portion of the mask 28, the areas of the masks 28 outside of the markings 30 and 31 being painted white so as to be practically invisible from a distance, with the result that when the banner 20 is hanging in a position of rest, as shown in Fig. 1, the markings 23, 24, 30, and 31 will present to the persons viewing the signal the impression that the banner 20 is without symbols of advice or instruction, such as the word Stop. In other

words, the word Stop will not be at this time displayed, and therefore there is little possibility that approaching persons could fail to quickly and clearly understand that the road is clear and passage over the tracks is safe. When the approach of a train, through use of well known electric control devices, causes action of the wigwag signal so that the arm 18 and the banner 20 are swung back and forth as indicated at 22, the word Stop is displayed first on one side of the confronting mask 28 and then on the other side thereof, the word Stop being obscured as it passes behind the upper portion of the mask 28. This results in an effect of flashing the word Stop on and off so as to bring it forcibly to the attention of observers. The effect of the word Stop flashing on and off is also to attract the attention of the public quicker than is possible by use of a simple banner having the word Stop thereon which is always in view of the public.

It will be perceived that in my invention I am able to conceal the Stop characters on a wigwag banner without the use of special latching mechanism for holding the banner behind a mask, for the reason that when the wigwag signal is not in operation, the banner 20 hangs at the lowest position of its swinging movement and therefore behind the masks 28.

Although I have herein shown and described my invention in simple and practical form, it is recognized that certain parts or elements thereof are representative of other parts, elements, or mechanisms which may be used in substantially the same manner to accomplish substantially the same results; therefore, it is to be understood that the invention is not to be limited to the details disclosed herein but is to be accorded the full scope of the following claims.

I claim as my invention:

1. A wigwag signal of the character described, including: a signal banner having on each side thereof an outline forming a figure and a symbol within said figure; means supporting said banner in suspended position and so that it may swing relative to an axis; means for swinging said banner from one side to another of a position of rest; and masks extending on opposite sides of said banner in its position of rest and covering said symbol and a portion of said figure when said banner is in said position of rest, said banner being moved from one side to another of said masks by said moving means so as to intermittently disclose said symbol when said signal is in operation, said masks having markings corresponding to the part of said figure covered by said masks so that when said banner coincides with said masks a complete figure will appear to the vision of the observer to give the appearance of the banner standing at rest without said symbol thereon.

2. A wigwag signal of the character described, including: a signal banner having a light, an outline forming a figure, and a symbol within said figure; means supporting said banner so that it may swing relative to an axis; means for swinging said banner from one side to another of a position of rest; and a mask covering said symbol and a portion of said figure without concealing said light when said banner is in said position of rest, said banner being moved from one side to another of said mask by said moving means so as to disclose said symbol when said signal is in operation, said mask having markings corresponding to the part of said figure covered by said mask so that when said banner coincides with said mask a complete figure will appear to the vision of the observer to give the appearance of the banner standing at rest without said symbol thereon.

3. A wigwag signal of the character described, including: a signal banner having an outline forming a figure and a symbol of warning within said figure; means movably supporting said banner; means for moving said banner from one side to another of a position of rest; and a mask covering said symbol and a portion of said figure when said banner is in said position of rest, said banner being moved from one side to another of said mask by said moving means so as to disclose said symbol when said signal is in operation, said mask having markings corresponding to the part of said figure covered by said mask so that when said banner coincides with said mask a complete figure will appear to the vision of the observer to give the appearance of the banner standing at rest without said symbol thereon.

GEORGE E. KINGSLEY.