(No Model.)

J. H. BACON.

SIGNAL.

No. 273,218.

Patented Feb. 27, 1883.

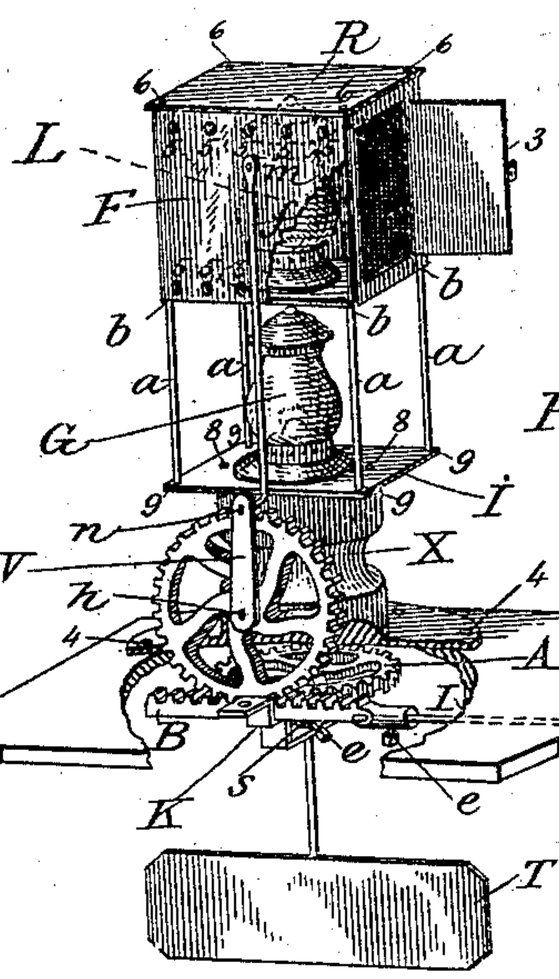
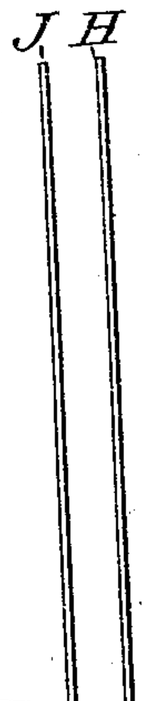
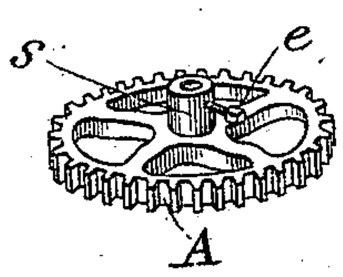
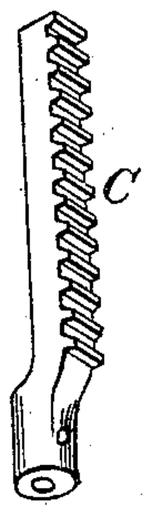
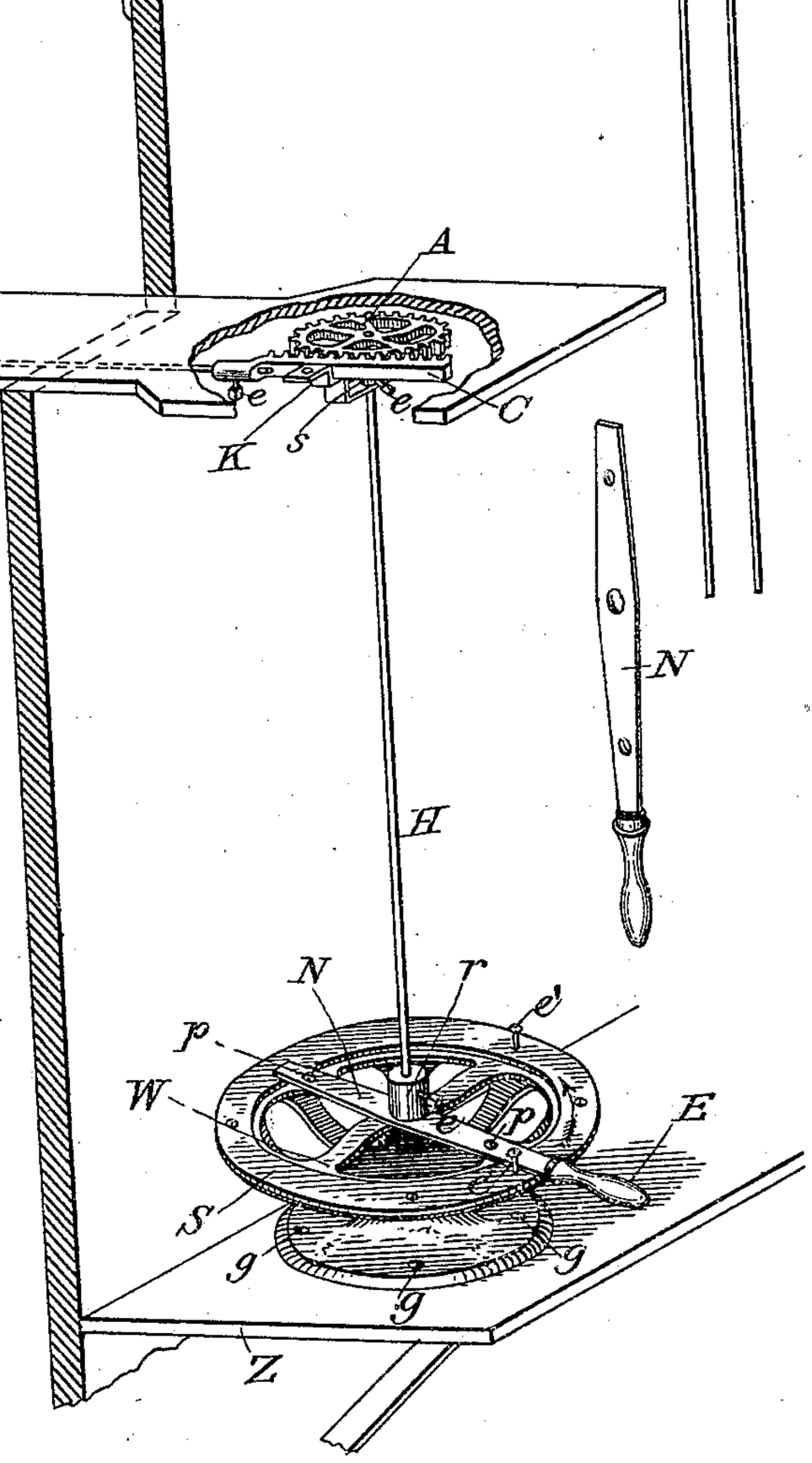


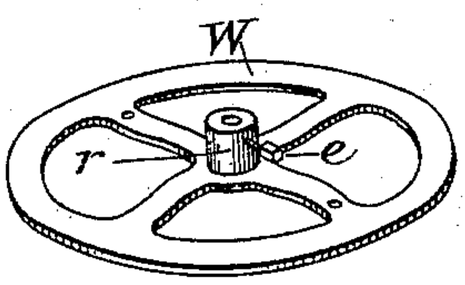
Fig. 1.

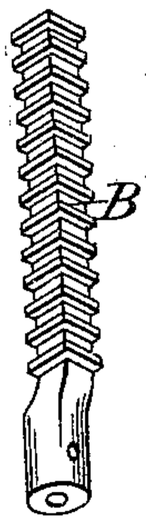


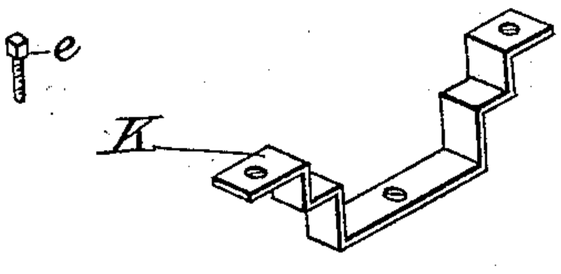


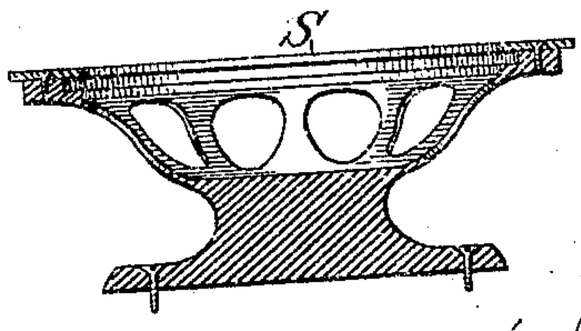












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UNITED STATES PATENT OFFICE.

JOSEPH H. BACON, OF CHARLOTTE, MICHIGAN.

SIGNAL.

SPECIFICATION forming part of Letters Patent No. 273,218, dated February 27, 1883.

Application filed May 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. BACON, a citizen of the United States, residing at Charlotte, in the county of Eaton and State of Michigan, have invented a new and useful Signal-Machine, of which the following is a specification.

My invention relates to an improvement in signals in which a sliding shield is used in the place of a revolving light; and the objects of my improvement are, first, to provide a signal exhibiting but one colored light at a time in all directions; second, to insure certainty as to the color of light intended to be shown; third, to prevent the light being jerked out or put out by rapid revolving of the lamp; and, fourth, to afford facilities in the rapidity and certainty of the operation of signals. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a detailed view in perspective of the signal ready for operation, connected with the mechanism intended to operate the same, the other views constituting the mechanism intended to operate the signal, Fig. 1, and consists of the separate base S, the slide W, the lever N, the cog-wheel A, the notched bars C and B, the guide K, and the rods J and H, and the set-screw *e*, said parts being shown detached.

Similar letters refer to similar parts throughout the several views.

The top R, the base I, the standards *a a a a*, extending from R to I, together with a partition upon which sets the lamp L, and which is connected to *a a a a* at *b b b*, Fig. 1, constitute the frame-work of my invention. The shield F completely encircles the standards *a a a a*, which serve as a guide. The shield F is also provided with a door, 3, to admit of ready access to adjust and tend to the lamp L within, and is made to slide readily up and down the standards *a a a a*. The shield F is further provided with an ear or loop, *m*, for receiving the rod *f*, used for connecting the shield F with the machine used in operating it. The shield F is constructed of thin sheet or galvanized iron, and is provided with holes 5 5 5 +, through which passes air to the lamp L after closing the door 3.

The block X supports the signal, as shown in Fig. 1, and is secured to the projection or fore-arm P by means of bolts, as at 4 4, and is broad enough on the top to receive the base I. The block X, which supports the device, being thus securely attached to P, I take the base I, which is either wood or iron, large enough to fully contain the bottom of an ordinary lantern, and fasten it, by means of screws 8 8, to the block X. The rods or standards *a a a a* are then screwed or fastened perpendicularly into I at 9 9 9 9, and a partition constructed of thin sheet metal is permanently secured to *a a a a* at *b b b*, midway between the top R and base I, attached by any desirable method, or by solder or screws at *b b b*. I now put on the shield F over the standards *a a a a*, being loose enough to readily move, after which I permanently secure to top R on the ends of *a a a a*, R having holes through the corners at *b b b b* for receiving *a a a a*, and the rods *a a a a* having a small shoulder on the top ends for receiving and permanently holding R, and to admit of riveting; or small nuts may be screwed on the ends. I now place a lamp or lantern, G, containing red light on the base I, also a lamp or lantern, L, showing a white light on the partition between the top R and the base I, and attach the connecting-rod *f* to the shield F at *m*.

For operating the device shown I take the base S and bolt or screw it on the operator's table Z at *g g g*. Then I take the slide W and place it on the top of S, S being grooved to admit the circular slide W, after which the lever N is placed over the hub *r* of W and fastened to W by the screws *p p*. The set-screws *e* and *e'* being screwed into S to regulate the lever N, I now put the rod H in the hub *r* of the slide W and secure it so as not to turn, except with the slide W, by means of the set-screw *e*, screwed into the hub *r*, securely holding the rod H. The cog-wheel (three of which are used in this machine, all being similar) A is cast with a hub, *s*, and attached to the top of the rod H, also secured by a set-screw at *s*. I now take the rod J and at one end attach, by means of the set-screw *e*, the notched bar C, which meshes into the cog-wheel A, attached to H, being held in proper

position by means of the guide K, fixed to the board P. At the other end of J, already mentioned, I attach, by means of the set-screw *e*, the bar B, notched on two adjacent sides, as shown. The bar B is held in position by means of the guide K, attached to P, extending from the building which supports the signal F. The wheel A under the signal meshes into one side of the notched bar B, and has a quarter-turn by the device shown. Another wheel A also meshes into the top of the notched bar B, and is secured to the block X by means of a journal, *h*, attached to block X. The vertical wheel A has an arm, V, attached to it at *h*, and contains a hole, *n*, at one end, through which passes the end of the connecting-rod *f*, the end of *f* being turned or bent at right angles, so as to work like an axle through the hole in the end of the arm V. The target T is secured into the hub of the horizontal wheel A under the signal F, supported by the guide K, by means of the set-screw *e*. I now take hold of the lever N at E, which passes over the base S from the set-screw *e*, (*e'* and *e'* being of different color, so as to serve as an indicator,) and move it quarter-way round to *e'*, thus turning the cog-wheel A quarter-way round, which causes the shield F to fall and the target T to turn.

Having thus described my invention, I claim—

1. The combination of a case supporting two stationary lights of different colors, a sliding opaque shade to obscure one of said lights when it discloses the other, and suitable gearing to operate the same from within the station-house, substantially as set forth.

2. The combination of a case supporting two stationary lights of different colors, a sliding opaque shade to obscure one of said lights when it discloses the other, suitable gearing to operate the same from within the station-house, and a rotating day signal operated in unison with said shade, substantially as set forth.

3. The combination, with a case supporting two stationary lights of different colors, of a sliding opaque shade to obscure one of said lights when it discloses the other, said shade having perforations to admit air for the purpose of combustion, substantially as set forth.

4. The combination of stationary lights of different colors, the shade F, the gears A, racks B and C, rods J H, stand S, slide W, lever N, and stops *e' e'*, substantially as set forth.

JOSEPH H. BACON.

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