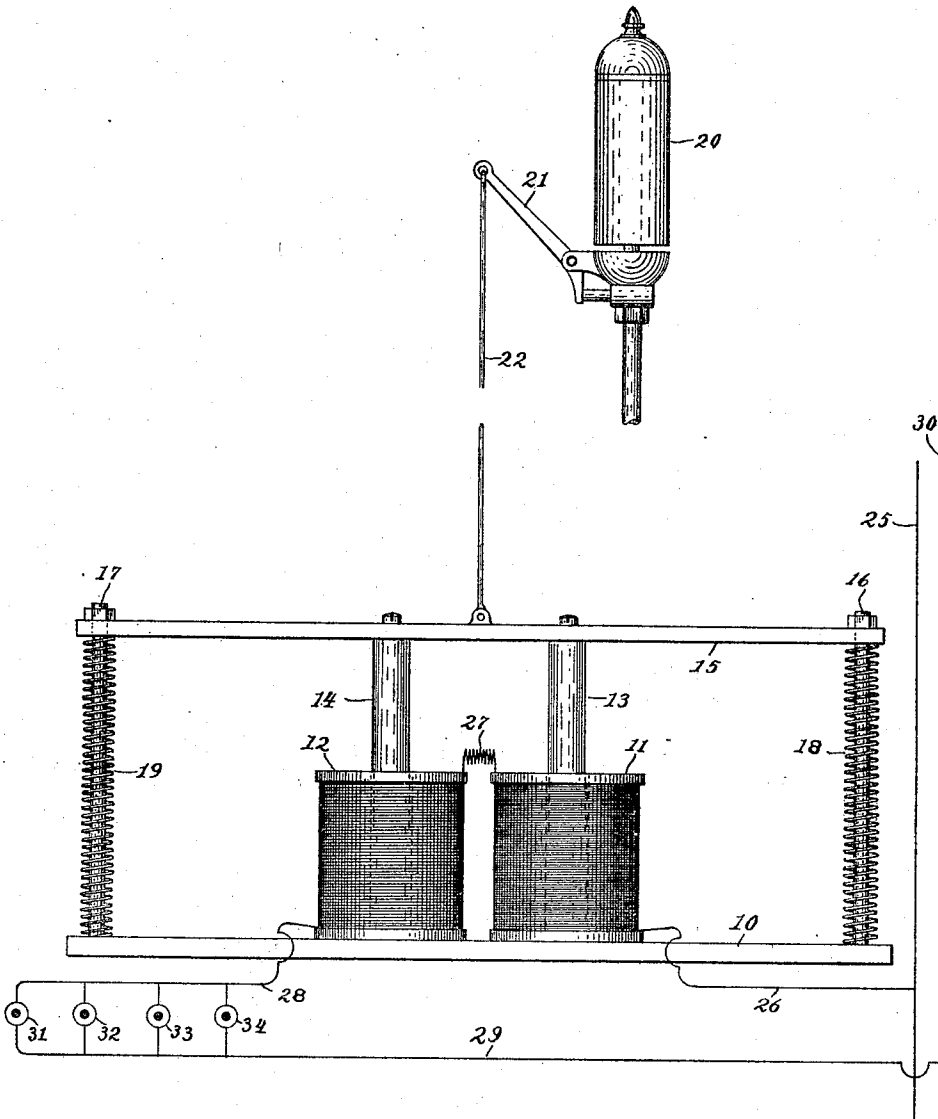


J. B. TIBBS.
ALARM CONTROLLER.
APPLICATION FILED OCT. 5, 1911.

1,209,231.

Patented Dec. 19, 1916.



Witnesses
Chas. N. Leonard.
L. M. Patterson.

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UNITED STATES PATENT OFFICE.

JOSEPH B. TIBBS, OF INDIANAPOLIS, INDIANA.

ALARM-CONTROLLER.

1,209,231.

Specification of Letters Patent.

Patented Dec. 19, 1916.

Application filed October 5, 1911. Serial No. 652,981.

To all whom it may concern:

Be it known that I, JOSEPH B. TIBBS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Alarm-Controllers, of which the following is a specification.

The object of my said invention is to produce an electrically operated mechanism for controlling steam or air whistles, or alarms, which may be connected so as to be conveniently operated from any location, or any number of locations, in the office, or other portions of a factory, or similar plant, and it consists in various improvements in the details of construction and arrangement of parts of an apparatus for accomplishing this purpose, all as will be hereinafter more fully described and claimed.

The accompanying drawing, which is made a part hereof and on which similar reference characters indicate similar parts represents a side elevation of an apparatus embodying my said invention.

Said apparatus consists of a base 10 upon which is mounted a pair of magnet coils 11 and 12, respectively. Coil 11 has an armature core 13 and coil 12 an armature core 14 which are connected at their tops by a cross-bar 15. The ends of said cross bar extend outwardly for a distance on each side of said coils and are perforated and mounted to slide upon vertical posts 16 and 17, respectively, said posts are supported in the base 10 and coiled springs 18 and 19 are mounted upon said posts, respectively, between said base and said bar 15 normally supporting said bar against appropriate nuts, or other limiting devices, on the upper ends of said posts. A steam or air whistle, or similar alarm, 20 is mounted in any convenient, or desired, location provided with an operating lever 21 which is connected by a wire, or similar connection, 22 with the central portion of bar 15. Magnet coil 11 is wound with finer wire than coil 12, as for instance coil 11 being wound with #14 wire, coil 12 will be wound with #9 wire, for a purpose to be presently explained.

The controlling electric current from a supply wire, as 25, comes in over a wire 26 which is connected with the coil 11 at its lower end. At the upper end coil 11 is connected to coil 12 by a wire 27 and the current goes out of coil 12 over a wire 28 to a

wire 29 which connects with the return, or ground wire 30. Push-buttons 31, 32, 33, and 34 are shown connected with the terminals of wires 28 and 29 at any point desired. There may be as many of such means of closing the circuit as there are places where it is desired to provide for the operation of the alarm.

In operation, as will be readily understood from the foregoing description, by closing the circuit by means of either of the push-buttons shown, or any other circuit closing means desired, located at any point in the office or wherever else may be desired, the magnets are energized and immediately operate to draw the armatures 13 and 14 downward and, through the connection 12, pull down lever 21 and sounds the alarm. The apparatus is very sensitive and responds instantly to the closing of the circuit. Immediately upon releasing the push-button, or other circuit closing means, the springs 18 and 19 operate to return bar 15 to its normal position which shuts off the steam, or air, and stops the alarm. Any number of alarms can be sounded in any relation desired, several short sharp blows, a single long blow, or an alarm consisting of alternate short and long blows, or any other plan desired may be used so that by devising a code of signals it is possible, at any point, to announce to the employees of the factory any information which may be of general consequence to them. For example, a fire in a certain section or department may be noted by one alarm, in another department by another alarm, the time for beginning and closing work may be announced by different alarms, the foreman or superintendent of any department may be summoned to the office by other alarms, and thus an alarm is provided for an indefinite variety of uses, adding greatly to its value and convenience, especially in a large plant.

Having thus fully described my said invention, what I claim as new and desire to secure by Letters Patent is:

An apparatus for operating alarm signals consisting of a bar providing a base, a pair of solenoid magnets arranged side by side and secured to said base, a pair of vertically disposed posts secured to said base at the respective ends thereof, nuts screw-threaded on said posts at the upper ends thereof providing adjustable stop members, a cross-bar having perforations receiving

said pair of posts and mounted to have sliding movement thereon limited by said stop members, said cross-bar secured to operate with the cores of said pair of solenoid magnets; a spring fitted on each of said posts and interposed between said cross-bar and said base and normally acting to hold the cross-bar in contact with said stop members, conductors adapted to connect said solenoids with a source of electrical energy, an alarm signal, and a connection between said alarm

signal and the cross-bar, substantially as set forth.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana this 16th day of September, A. D. nineteen hundred and eleven.

JOSEPH B. TIBBS. [L. s.]

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."