

No. 630,857.

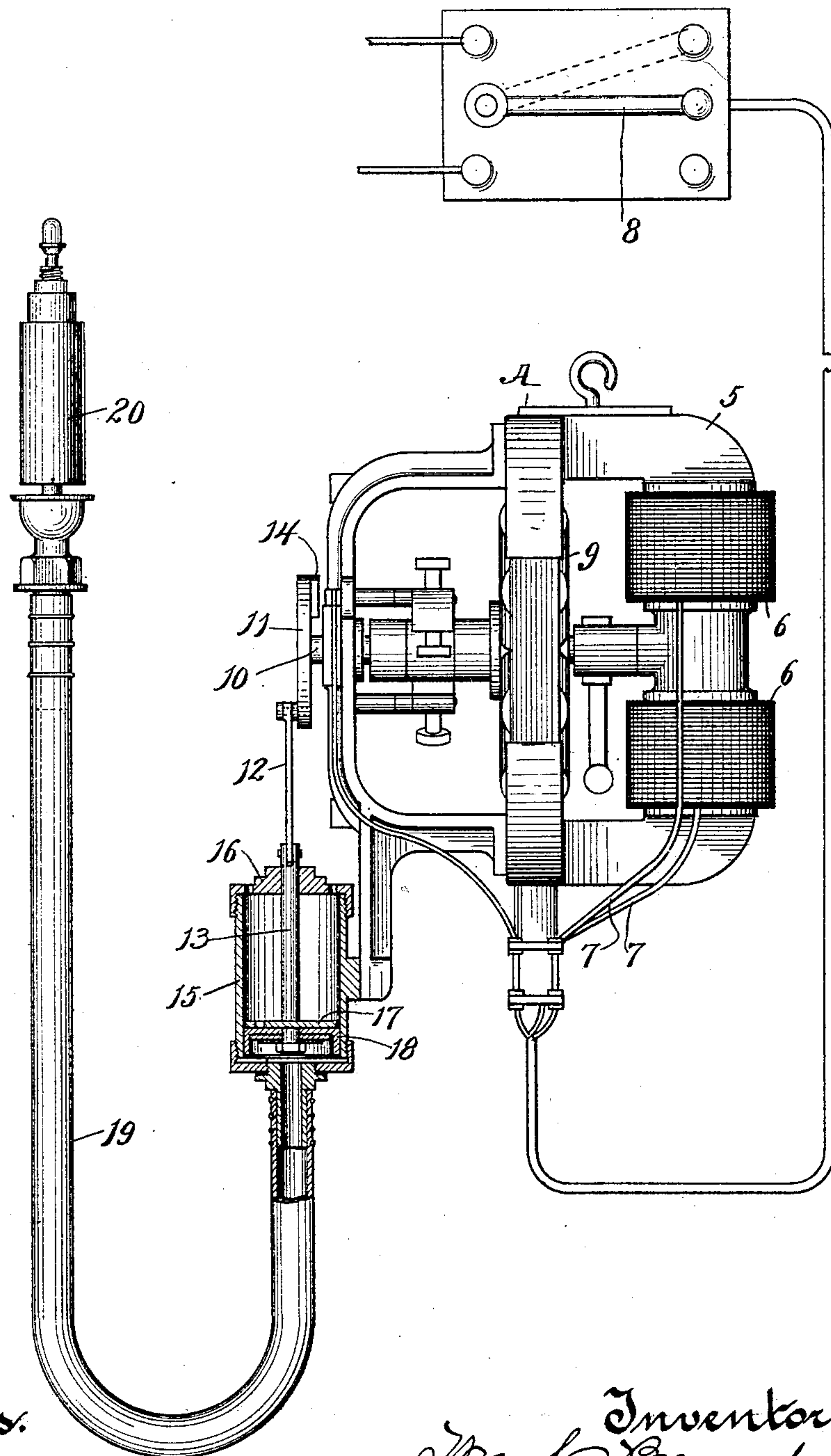
Patented Aug. 15, 1899.

W. C. BRUMDER & J. ROGGINGER.

ALARM DEVICE.

(Application filed Sept. 19, 1898.)

(No Model.)



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM C. BRUMDER AND JOHN ROGGINGER, OF MILWAUKEE, WISCONSIN; SAID ROGGINGER ASSIGNOR TO SAID BRUMDER.

ALARM DEVICE.

SPECIFICATION forming part of Letters Patent No. 630,857, dated August 15, 1899.

Application filed September 19, 1898. Serial No. 691,317. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM C. BRUMDER and JOHN ROGGINGER, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Alarm Devices, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

10 It is often desirable for a person in one locality to secure the attention of another person at a more or less distant locality, and for this purpose an alarm or signal given in the vicinity of the distant person under the
15 control of the first person is a desirable expedient to secure the attention of that distant person. An illustration of this situation exists in all cities where policemen patrol the city, and especially where police signal-boxes in the different parts of the city are
20 connected by telephone or otherwise electrically to a central police-station or general headquarters. An especial purpose of our improved alarm device is to provide alarm mechanism at or near a police signal-box so connected electrically to the central police-station or other headquarters in a city that a
25 person at such central station or headquarters can put the alarm mechanism in operation at the distant signal-box with such effect as to challenge the attention of any policeman in that vicinity, and thereby call him to the signal-box for telephone communication with the central station.

35 The invention consists of the mechanism and devices, their parts and combinations, as herein described and claimed, or their equivalents.

40 The drawing represents our improved alarm device, parts being in section for conveniently exhibiting interior construction.

As a means for operating our improved alarm device and as a part of the devices making up our improved construction we provide an electric motor to be located at the
45 place where the alarm or signal is to be given. Any form of electric motor can be employed in which there is a revolving armature provided with a revolving shaft, or, in fact, any

electric motor by which rotary or reciprocal 50 motion can be obtained.

In the drawing, A is a small electric motor of a form adapted to be suspended by any convenient means, and this motor in the case where a police signal-box is the locality at
55 which the alarm is to be given may be suspended in the signal-box. The magnet 5, which to some extent forms the frame of the motor, is suitably wound with wire electric coils 6 6, that are connected electrically by 60 the conducting-wires 7 7 to a distant dynamo-battery or other source of electric supply through a switch 8, located at the central station or headquarters, where the switch is under the control of a person at such station
55 or headquarters. A revoluble armature 9, mounted in the framing of the motor and in proper relation to the magnet, is provided with a shaft 10, on which there is a fixed disk 11, provided with an eccentric wrist, to which
70 is connected a pitman 12, pivoted at its other extremity to the stem 13 of a valve in an air-pump. The weight of the pitman and valve on the disk is preferably balanced by a counterweight 14 on the disk.

75 In our improved alarm device the alarm or signal is given by means of a pneumatic whistle, and the air-pump is provided for furnishing the requisite air under pressure or force for operating the whistle. The air-pump consists of a hollow cylinder 15, provided with a cap 16, having orifices through it for the admission of air, and through which cap the stem 13 of the piston reciprocates, being held in position and guided in its travel by this
85 cap. The valve employed may be of any suitable form; but we have shown as a desirable form a valve consisting of a perforated metal disk 17, secured to the stem 13, and a flexible leather packing 18, secured to the
90 stem 13 on the inner side of the disk 17, the construction being such that as the valve is withdrawn toward the upper end of the cylinder air passes through the disk 17 and past the flexible leather packing 18, and as the
95 piston is forced downwardly toward the distant end of the cylinder the leather packing is so expanded by the pressure of the air as

to fit air-tight against the wall of the cylinder and force the air outwardly through the orifice provided therefor in the distant end of the cylinder and through the tube 19, leading therefrom to the whistle 20, which is thereby sounded, producing the desired alarm. The cylinder 15 is preferably fixed to and supported on the framing of the motor, being thereby secured in proper relation thereto, and the whistle 20 may be suspended or supported by any convenient means, the tube 19 being preferably flexible to permit of locating the whistle at any desired point with relation to the motor or air-pump.

It will be understood that by making the electrical connection at the switch 8 the motor A will be put into action and that thereby the air-pump will be put into operation, causing the whistle to sound an alarm of such intensity as to challenge the attention of persons in its immediate vicinity or even several blocks distant.

What we claim as our invention is—

1. An alarm device, comprising a whistle adapted to be sounded by fluid medium, a device for supplying the medium to and of forcing it through the whistle, an electric motor connected by an electric conductor to a power-supply the motor being adapted for operating the device applying the medium to and forcing it through the whistle, and a switch or electric power-supply controlling means at a distant locality in the electric circuit adapted

under the control of the attendant for putting the motor and whistle into operation at the distant whistle locality.

2. An alarm device, comprising an electric motor mounted in a portable frame, a pump-cylinder secured to the motor-frame, a piston in the cylinder connected to and adapted to be actuated by the motor, a tube connecting the pump-cylinder to the whistle, means connecting the motor to an actuating electric power-supply, and a switch at a distant locality in the means for supplying electric power whereby the attendant at a locality distant from the whistle can control the running of the motor and the sounding of the whistle thereby.

3. In an alarm device, an electric motor in a portable frame and having a revolving armature provided with a revoluble shaft, a pneumatic cylinder secured to the motor-frame, a reciprocable valve in the cylinder connected to a crank or eccentric pin on said shaft, and a portable pneumatic whistle connected pneumatically by a flexible tube to and actuated by said pneumatic supply mechanism.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM C. BRUMDER.
JOHN ROGGINGER.

Witnesses:

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