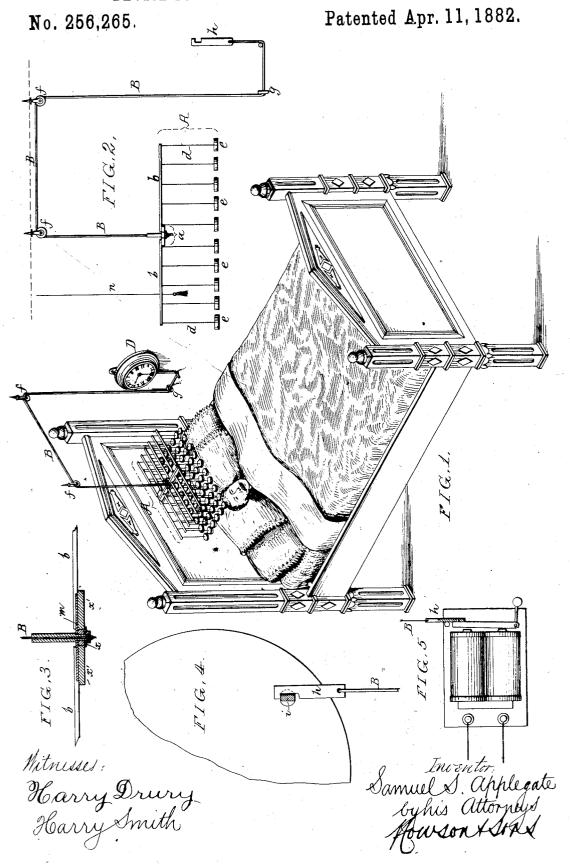
S. S. APPLEGATE.

## DEVICE FOR WAKING PERSONS FROM SLEEP.



## UNITED STATES PATENT OFFICE.

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## DEVICE FOR WAKING PERSONS FROM SLEEP.

SPECIFICATION forming part of Letters Patent No. 256,265, dated April 11, 1832. Application filed December 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. APPLEGATE, a citizen of the United States, and a resident of Camden, New Jersey, have invented an Im-3 proved Device for Waking Persons from Sleep, of which the following is a specification.

The object of my invention is to construct a simple and effective device for waking persons from sleep at any time which may have pre-10 viously been determined upon, the device being also adapted for use in connection with an electric or other burglar-alarm apparatus, in place of the usual gong-alarms.

In the accompanying drawings, Figure 1 is 15 a perspective view of my improved waking device, showing the manner in which it is to be used; Fig. 2, a side view of the device; Fig. 3, an enlarged transverse section of part of the same; Fig. 4, an enlarged view of part of one 20 form of releasing device, and Fig. 5 a view of another form of releasing device.

Ordinary bell or rattle alarms are not at all times effective for their intended purpose, as a person in time becomes so accustomed to the 25 noise that sleep is not disturbed when the alarm is sounded.

The main aim of my invention is to provide a device which will not be liable to this objection.

In carrying out my invention I suspend a 30 light frame in such a position that it will hang directly over the head of the sleeper, the suspending-cord being combined with automatic releasing devices, whereby the frame is at the proper time permitted to fall into the sleeper's 35 face.

In the drawings, A represents the frame, which consists of a central bar, a, having on each side a number of projecting arms, b, the whole being made as light as is consistent with proper strength. From each of the arms b hang a number of cords, d, and to the lower end of each of these cords is secured a small block, e, of light wood, preferably cork. These cork blocks, however, are not essential, as tas-45 sels or balls of zephyr may be attached to the cords, or the latter alone may be used, or a rectangular frame having a network of cords may take the place of the frame with its pendent cords, the only necessity to be observed in constructing the frame being that when it falls it will strike a light blow, sufficient to

cause pain. I have found the frame  $\Lambda$ , with its pendent cords and blocks e, to answer this purpose well in practice, and hence I prefer to 55

adopt this construction.

The cord B, whereby the frame A is suspended, passes through eyes ff on the ceiling of the room, or on any other available support, and through an eye, g, on the wall, the end of the 60 cord being furnished with a notched plate, h, which is so connected to the alarm mechanism of an ordinary alarm-clock, D, that when said alarm is sounded the plate h will be released and the frame A will fall.

I prefer to limit the extent of fall of the frame A so that the bars a and b of the same will not come into contact with the sleeper's face, this result being attained in the present instance by the contact of the plate h with the eye 70 g, through which said plate cannot pass. A suitable stop, adapted to act in conjunction with any one of the eyes through which the cord B passes, may be used, however, to attain this object.

The notched plate h is adapted to engage with the winding-spindle i of the alarm mechanism of the clock, as shown in Fig. 4, the spindle being flattened on one side, and the plate being adapted to this flattened portion of the spin- 80 dle, so that when said spindle commences to turn the plate h will be released from the control of the same. Various means, how-Various means, however, may be resorted to for effecting the automatic release of the suspending-cord B- 85 for instance, the hour-hand of an ordinary time-piece may be provided with a pin for striking and releasing the plate h at a certain hour, or the plate may be retained by the armature of an electro-magnet and released on the 90 attraction of said armature by the magnet, (see Fig. 5,) the circuit being completed by the hands of a clock, or by any of the usual electric burglar-alarm devices connected to the doors or windows of a house.

By a simple connection between the cord B and the key of a self-lighting gas-burner, provision may be made for turning on and lighting the gas in the room at the same time that the sleeper is awakened.

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In order that the frame A may be rendered more compact for transportation, I make the central bar, a, of said frame in three parts, x x'awaken the sleeper, but not heavy enough to | x', (see Fig. 3,) the central part, x, being rigid, and the other parts, x' x', carrying the bars b and being hinged to the part x, so as to be folded up against each other, back to back, when it is desired to pack the frame away, a turn-buckle, m, on the rigid part x of the bar serving to retain the other parts of the frame

in position when extended.

The frame A shown in the drawings is about twice as long as it is wide, and in order to retain the frame in its proper position transversely to the bed I hang to the ceiling or other support a cord, n, having at the lower end a suitable weight or tassel, this cord occupying a position between two of the bars b of the frame, so as to prevent the latter from

swinging or twisting around.

I claim as my invention—

1. As a means of waking persons from sleep, the combination of the light frame A, of the character described, a cord for suspending the same over the bed, and a device for retaining and for automatically releasing said cord, all substantially as specified.

2. The combination of the suspension cord and a device for retaining and automatically releasing the same with a frame, A, having

pendent cords d, as set forth.

3. The combination of the suspension-cord and a device for retaining and for automati-

cally releasing the same with a frame having 30 pendent cords d, with blocks e, as specified.

4. The combination of the suspension-cord B and the frame A with the retaining-cord n,

as set forth.

5. The combination of the frame A, the suspension-cord B, and a device for retaining and releasing the latter with a stop whereby the descent of the frame on the release of the cord is limited, as specified.

6. The combination of the bars b with the 40 central bar, a, of the frame, said bar a being made in parts x x', hinged together, the parts x' carrying the bars and the part x having a

turn-buckle, m, as set forth.

7. The combination of the frame A and the 45 suspending cord B, having a notched plate, h, with the winding-spindle i of the alarm mechanism of a clock, said spindle being flattened for the reception of the notched plate, as set forth.

Intestimony whereof I have signed my name to this specification in the presence of two sub-

scribing witnesses.

SAMUEL S. APPLEGATE.

Witnesses:

MARIA APPLEGATE, HARRY SMITH.