(No Model.) 2 Sheets—Sheet 1.

C. L. McKESSON.

OFFICE INDICATOR.

No. 569,384. Patented Oct. 13, 1896.

Fig. 1

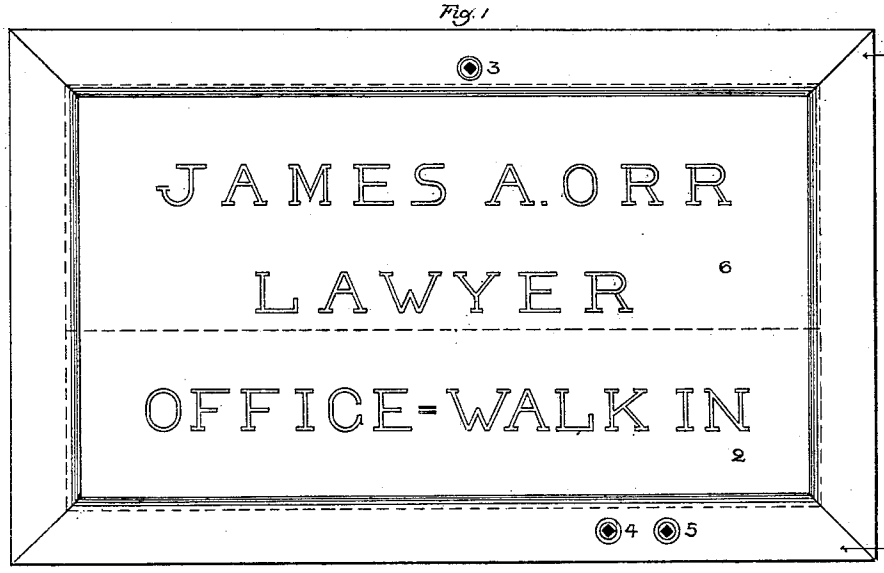


Fig. 3

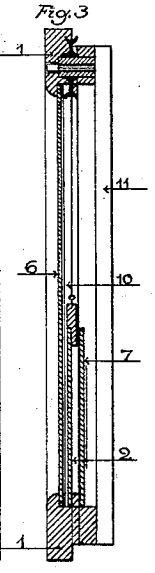
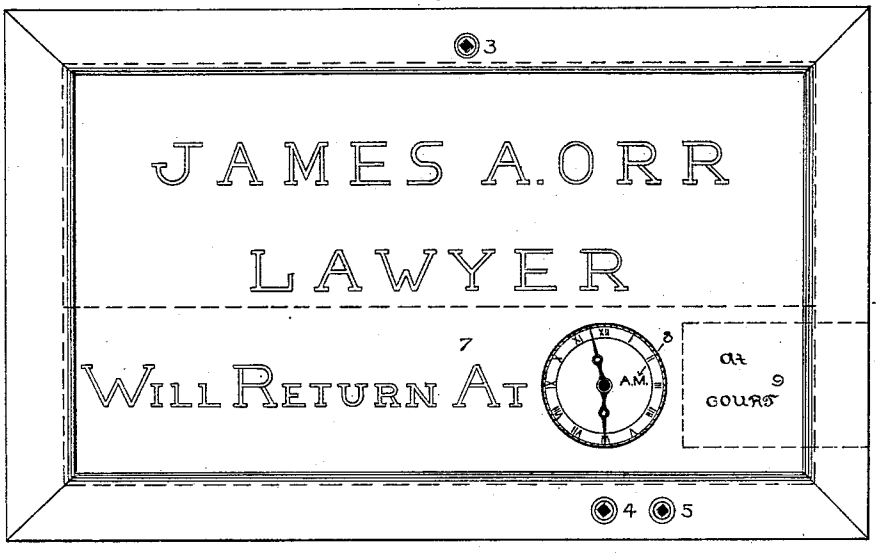


Fig. 2



WITNESSES:

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INVENTOR

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4

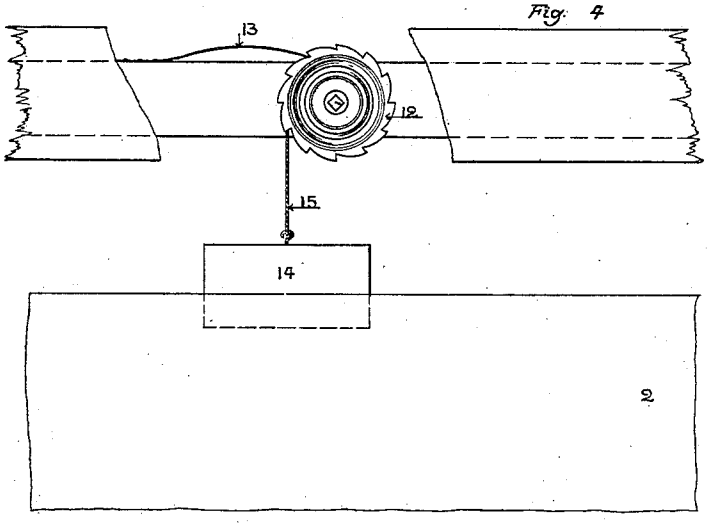


Fig. 8.

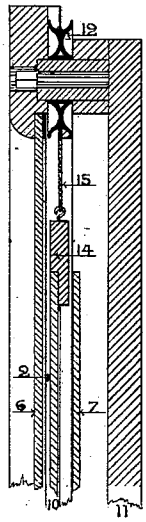


Fig. 9.

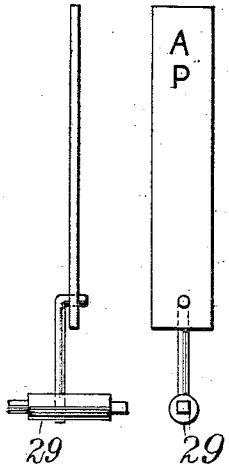


Fig. 5

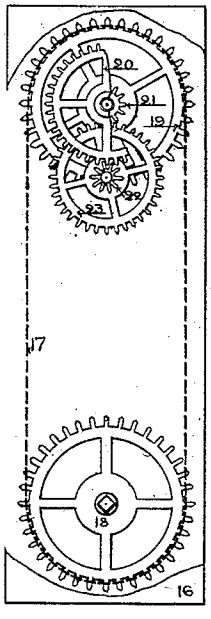


Fig. 6

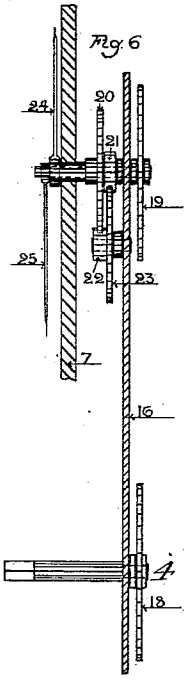
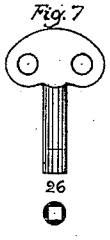


Fig. 7



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UNITED STATES PATENT OFFICE.

CHARLES L. McKESSON, OF HOWARD, KANSAS.

OFFICE-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 569,384, dated October 13, 1896.

Application filed March 4, 1896. Serial No. 581,821. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. McKESSON, a citizen of the United States, residing at Howard, in the county of Elk and State of Kansas, have invented a new and useful Office-Sign, of which the following is a specification.

My invention relates to improvements in office-signs which not only serve the general purposes of a sign, but also as an indicator or directory.

The objects of my improvement are, first, to provide a beautiful and elegant office-sign on glass or other transparent material; second, to afford easy and quick facilities for indicating on the sign the exact time of return and place where the occupant of the office can be found when he is absent from the office; third, to cover that part of the sign used as an indicator in such a manner that it will be visible but not accessible except to the one who sets it with the detached key, thus rendering the directions given by the indicator secure from alteration or change by an unauthorized person. I attain these objects by the mechanism illustrated in the accompanying two sheets of drawings, in which—

Figure 1 is a view of the sign as it will appear when the one whose name is on the sign is in his office. Fig. 2 is a view of the sign as it will appear in the absence from the office of the occupant when he desires to indicate the time of his return and the place where he may be found. Fig. 3 is a vertical sectional view of one end of the sign-frame, showing the construction of the same and the location of the different glasses upon which the sign and indicator are made. Fig. 4 is the mechanism for moving the slide for the purpose of exposing the indicator. Fig. 5 is a view of the mechanism for setting the indicator. Fig. 6 is a side view of the mechanism shown in Fig. 5, also the hands used to indicate the hour of return. Fig. 7 is a side and end view of the key used to set the indicator. Fig. 8 is a sectional view of Fig. 4. Fig. 9 is a detail view.

Similar figures refer to the same parts throughout the several views.

1 is an ordinary wood or metal frame in which is placed the glass 6, upon the upper part of which the name and business is given. This glass is all made opaque down to the slide 2, except the letters which are left transparent for the purpose of showing them on a fancy background. That part of the glass covering the slide 2 is transparent, so that the letters on the slide 2 can be plainly seen. The slide 2 is made of glass, is opaque, and on it may be placed the words "Office," or "Office, Walk in," or any inscription suitable for any particular business.

3 is a small round hole through the frame 1, into which the end of the key 26 is inserted to raise the slide 2 by means of the pulley 12 and the cord 15, as shown in Fig. 4.

4 and 5 are holes through the frame 1, into which the key 26 is inserted to set the hands on the clock-dial and to adjust the "A" and "P" before the letter "M" on the clock-dial.

7 is an opaque glass, which becomes visible when the slide 2 is raised, as shown in Fig. 2, and on this glass are painted the words "Will return at;" also, the dial of a clock indicating the hours and minutes, together with the letter "M," as indicated by 8. That part of the glass 7 indicated by 9 is left blank and is covered by a celluloid card, upon which can be written with a lead-pencil any information as to the residence or the place at which the occupant of the office can be found when he is absent from his office. The card 9 is inserted or withdrawn at will through an opening in the end of the frame 1, back of the glass 6.

In Fig. 3, 10 is the groove in which the glass slide 2 moves up and down back of the glass 6, and 11 is the back board of the sign.

The pulley 12 in Fig. 4 has a groove in the rim for the reception of the cord 15, and the inner edge of the pulley is notched to form a ratchet into which the spring 13 works. The pulley 12 is attached to a shaft which passes through it. This shaft has a square shoulder at the end, which enters the frame for the purpose of receiving the key 26.

14 is a wooden block attached to the center of the glass slide 2, with a staple into which the cord 15 may be fastened.

In Figs. 5 and 6, 16 is designed to represent a frame for holding in place the sprocket-wheels 18 and 19, the pinions 20, 21, 22, and 23, and the shaft 29. 29 refers to the "A" or "P" actuating means.

18 is a sprocket-wheel fastened securely to a small shaft which passes through its center, as shown in Fig. 6. The shaft has a square shoulder at one end, and this shaft and shoulder passes into the hole 4 in the frame 1. The sprocket-wheel 18, when the hands are being adjusted, is turned by means of the key 26, working on the shoulder in the hole 4. The sprocket-wheel 19 is connected with the sprocket-wheel 18 by means of the chain 17, by means of which it is turned in unison with the sprocket-wheel 18 when the hands are being adjusted. The sprocket-wheel 19 has a small shaft to which it is securely fastened, passing through its center down through the pinions 21 and 20 and through a hole in the glass 7 and into the hub on the minute-hand 25. The sprocket-wheel 19, the pinion 21, and the hand 25 are all securely fastened to this same shaft and turn in unison together when the hands are being set. Pinion 20 has a sleeve projecting from its lower surface and works loosely upon the shaft attached to the sprocket-wheel 19. The end of this sleeve projects into the hole in the glass slide 7 and into the hub on the hour-hand 24. The cogs on pinion 20 engage those on the small pinion 22, by which it is turned when the hands on the dial are being adjusted. The pinions 22 and 23 are fastened together and turn in unison upon a short post or shaft attached to the frame 16. The cogs on pinion 23 are engaged by those on pinion 21, by which it and pinion 22 are turned. These pinions are so proportioned that when the sprocket-wheel 18 is turned by means of the key 26 the sprocket-wheel 19, the pinion 21, and the minute-hand 25 are turned at the same rate of speed. Pinion 22 engages the teeth on pinion 20 and moves it and the hour-hand attached to it one-twelfth as fast as the minute-hand moves, thus providing that both the minute and hour hands can be made to indicate any desired time by means of a single key.

29 is a shaft with a square shoulder on which the key 26 can slip and is connected with the slide, upon which the letters "A" and "P" are painted. It has an arm and pin, so that when the shaft 29 is turned by means of the key 26 the slide on which the letters "A" and "P" are painted is moved up and down, exposing each of the letters in turn through a transparent place in the glass at the left of the "M."

24 and 25 represent the hour and minute hands, respectively.

In practice the sign is operated as follows: When the mechanism illustrated in Figs. 5 and 6 is used, the sign is fastened to the door in any convenient place, when it appears substantially as shown in Fig. 1, only upon the sign may be the name of any person with his occupation and any words which such person may wish to substitute in place of the word "Office." When leaving his office, the operator takes from his pocket the key 26 and inserts it in the hole 3 and turns the key to the right, thus raising the slide 2 up back of the opaque part of the glass 6 and exposing the slide 7, together with the words "Will return at" and the clock-dial 8 and the celluloid card 9. The operator then removes the key from the hole 3 and inserts it in the hole 4 and by turning the key moves the hands until they indicate the hour and the minute when he expects to return. If he wishes to change the letter indicating the meridian, he removes the key 26 from the hole 4 and inserts it in the hole 5 and turns the key to the right to expose the letter "A" and to the left to expose the letter "P" before the "M" on the dial. If he wishes to give directions as to where he may be found, he removes the celluloid card and writes thereon the desired information and returns it through the end of the frame to its place at the right of the dial of the clock. The key is removed from the hole 5 and placed in his pocket. The sign now becomes both a sign and an indicator of the time of return and the place where the occupant of the office can be found, and the indicator is secure from molestation or change by any maliciously-disposed person, the glass 6 effectually covering the indicator, and the key by which the same is set being detached and removed. When the operator returns, he inserts the key 26 in the hole 3, raises the spring 13, and lowers the slide 2, thus restoring the sign to a simple office-sign, as shown in Fig. 1.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination in an office-sign of the glass 6 with a sign giving name and occupation upon the upper part thereof and the lower part left transparent to act as a covering for the slide 7 containing an indicator, consisting of a clock dial and hands, a celluloid card and suitable matter painted on the glass and written on the card, substantially as set forth.

2. In an office-sign the combination of the slide 2, the groove 10 in the frame of such sign, the pulley 12 with a ratchet edge for the reception of the spring 13, together with a shaft having a square shoulder at one end, providing a way by which the pulley can be turned by means of a key inserted through a hole in the frame, the cord 15 for raising the slide, the block 14 fastened to the center of such slide and the staple in such block to which the cord 15 is fastened for the purpose of moving such slide up and back of the opaque part of the glass 6, and holding it there, substantially as set forth.

3. In an office-sign the sprocket-wheels 18 and 19 attached to a shaft with a square shoulder so that the same can be turned by means of a round key with a square hole in the end of it, the sprocket-chain connecting the sprocket-wheels 18 and 19, the sprocket-wheel 19 and the pinion 21 securely fastened to a shaft which passes through the pinion 20 and the sleeve thereto attached, the pinion 23 which engages in and is turned by the pinion

21 and the pinion 22, which engages and turns the pinion 20, the hour-hand attached to the sleeve on pinion 20, and the minute-hand attached to the shaft to which the sprocket-wheel 19 is fastened, by means of which mechanism the minute-hand of the clock is moved over the dial 8, twelve times as fast as the hour-hand when the sprocket-wheel is turned by means of the key, substantially as set forth.

4. In an office-sign the combination of a wooden or metal frame with the groove 10 providing for the moving of the slide 2 up back of the opaque part of the sign and the holes 3, 4 and 5 for the reception of a key to raise the slide 2 and set the hands on the clock-dial 8 and adjust the "A" and "P" before the "M," substantially as set forth.

CHARLES L. McKESSON.

Witnesses:
J. A. BENSON,
ORRIN NELSON.