Oct. 10, 1933. E. R. SWETT, JR 1,929,759

FIRE ALARM SYSTEM

Filed Aug. 25, 1930 2 Sheets-Sheet 1

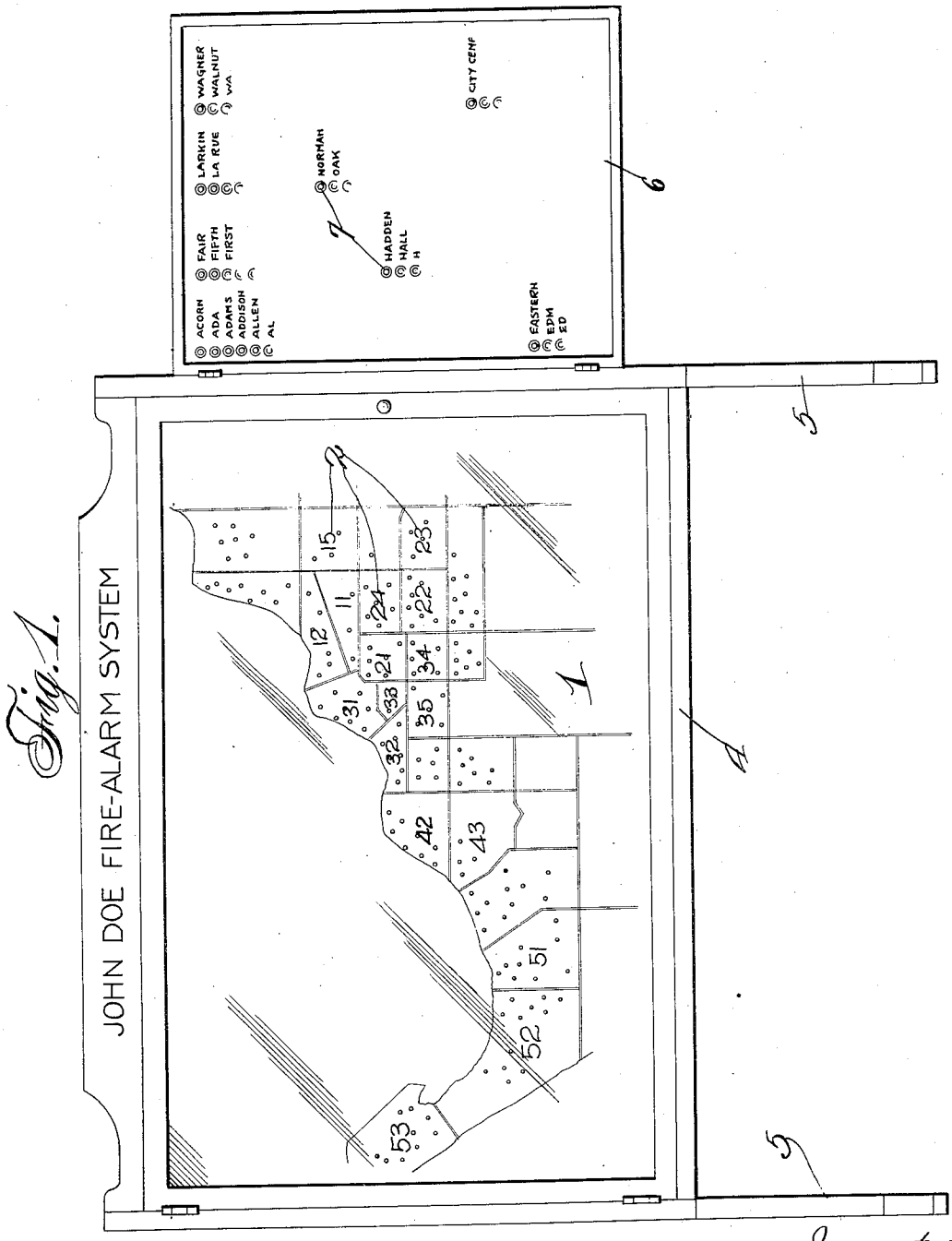


Fig. 1.

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Fig. 2.

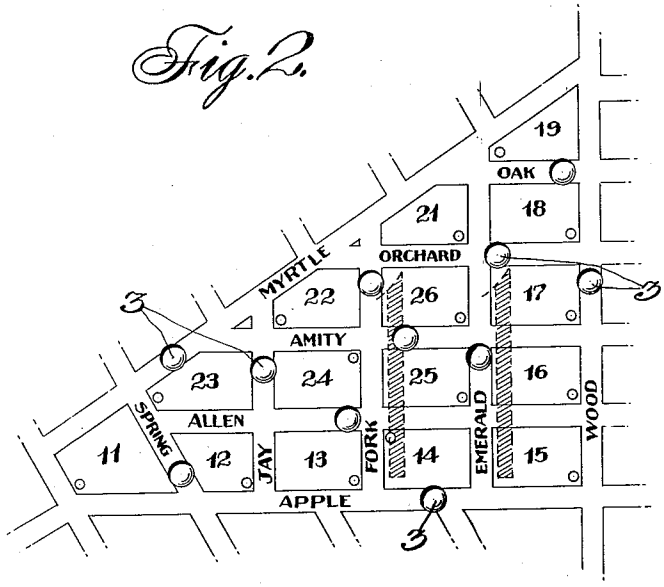
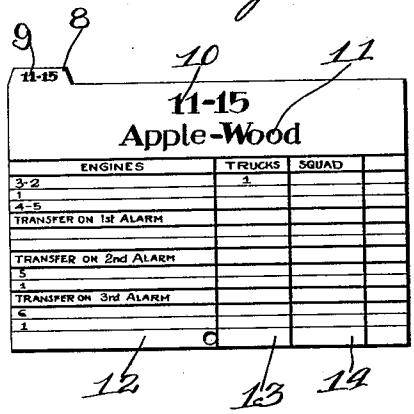


Fig. 3.



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FIRE ALARM SYSTEM

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1 Claim. (Cl. 35—6)

This invention relates to improvements in fire alarm systems.

One of the objects of the present invention is the provision of a fire alarm system which will speed up the alarm system so that the alarm and the location of the fire can be more quickly conveyed to the engine companies, truck companies and hook-and-ladder companies, which are to respond to each individual fire, thus saving considerable time in the answering of a fire alarm.

Another object of the present invention is the provision of a fire alarm system which is particularly adapted for alarms which are given over the telephone to a central operator, and wherein the four digit system is used for conveying the correct location of the fire to the different engine companies, truck companies, etc., which are to answer each fire, so that each company will note when they are to respond to an alarm and will also note the exact location of the fire.

A further object of the present invention is the provision of a fire alarm system which includes the zoning of a city or town into different zones, numbering each zone and providing a map disclosing the numbering of the city which will be located at the fire headquarters where the operator takes all calls for fires so that the operator can readily ascertain the location of the fire and then transmit the location to the proper engine companies, etc., over the usual fire alarm transmitter.

With the above and other objects in view, the invention consists in the novel features of construction, the combination and arrangement of parts hereinafter more fully set forth, pointed out in the claim and shown in the accompanying drawings wherein:

Figure 1 is an elevation of the board and map which are used in the central alarm headquarters with the switchboard therefor supported in close proximity to the map;

Figure 2 is an enlarged fragmentary front elevation of the board and map, showing in detail one of the zones on the map;

Figure 3 is a front elevation of one of the cards used in the system which are retained in card files located at the various fire stations, as well as in the officers' quarters and the central alarm headquarters of the fire department.

In a fire alarm system of the above character, it is necessary to provide a map of the city or town in which the system is located and in the present instance, the map in general is indicated at 1 and on this map, the city is divided into zones which are indicated by the large numerals 2 and in each of which zones there are a number of fire boxes located, and each block in the zone is numbered, indicating the number of the firebox or block. This is clearly illustrated in Figure 2 wherein the large numeral 11 indicates the number of the zone, said zone being bounded by Myrtle, Wood and Apple Streets, the zone in the present instance being substantially triangular as illustrated. However, these zones may be laid out in various shapes according to the number of blocks in each zone.

As shown in Figure 1, on the large board as well as by the small diagram in Figure 2, each street may have one or more indicating lights 3, and as this map is placed upon a board, the board is provided with openings and the lights are positioned behind the openings so that the illumination from each light will be disclosed through the openings.

This board on which the map is located is preferably arranged within a cabinet indicated at 4 and supported upon suitable legs 5. Hinged to one side of the cabinet 4 is a switchboard 6 and arranged in vertical rows on the switchboard are the names of different streets in the city as well as the names of different public buildings, large factories and similar places where a single number will be used to designate the location of the fire in that vicinity. Each name on the switchboard is accompanied by a switch 7 which is connected up with the proper light on the map 1, so that when this switch is pressed, the street, the name of which appears next to the switch, will be lighted up on the map. Therefore, if a fire alarm is telephoned in to the headquarters operator, the operator will ascertain the location of the fire and then illuminate the street on which the fire is located and the nearest intersecting street which will readily disclose to the operator the nearest block number in the zone and he will transmit this information to the different engine houses, etc.

In connection with the map and switchboard, a card index is provided at all engine houses with a plurality of cards similar to the one illustrated in Figure 3, and each card will be provided with a tab 8 at the upper left-hand corner on which the number of the card is printed, as shown at 9, and furthermore in large figures on the body of the card, as shown at 10, the location of the alarm or box is printed, while directly beneath the large numbers 10, the intersection of the two streets at this point is also indicated as shown at 11. The balance of the card is divided in three sections 12, 13, and 14; the section 12 hav-

ing different engine companies indicated thereon which are to respond to the alarm for this particular location, and in section 13 the numbers of the trucks which are to respond to this alarm are given, and in section 14 as indicated thereon, the number of the squad to respond.

As shown in Figure 3, on this particular card, engine companies 3, 2, 1, 4 and 5, respond to the alarm, while on the second alarm there is a transfer of engine companies 5 and 1, while on the third alarm there is a transfer of engine companies 6 and 1.

As stated heretofore, this system is particularly designed where the alarm of fire is telephoned to the headquarter's operator of the fire department, and as an operator is always stationed at this particular point, the location of the fire is ascertained by the operator, and when as in the present instance, the fire is located at Wood and Apple Streets, as given by the informant, the operator will press the switch on board 6 adjacent the word Wood, lighting up Wood Street on the map 1, and will then press the switch adjacent the word Apple on the board 6, lighting up Apple Street on the map and as soon as these two streets are lighted, the operator will ascertain that the nearest call box to Wood and Apple Streets is 15 and that the number of the zone in which this call box is located is number 11.

As the system is so designed that it is necessary that four digits be transmitted through the medium of a single gong to each engine house, truck house and hook-and-ladder company, the first two digits sounded in the present instance are 1—1, immediately giving the zone in which the fire is located. Therefore, all engine companies, truck companies, hook-and-ladder companies who respond to this particular zone will immediately prepare to leave, and as soon as the other two digits 1—5 are sounded, it will give the exact location of the fire, and one of the firemen will refer to the card index, locating card 11—15, quickly disclosing the fact that the fire is located at the corner of Apple and Wood Streets.

It will be apparent from the foregoing that by using a system of this character, the time of dispensing the correct location of a fire to the fire companies to respond will be speeded up considerably and the errors which sometimes occur in the taking of a fire location over a telephone from the operator to the fire company, is reduced to a minimum as the location is not given orally, but automatically by digit system. The system is used in connection with a well known type of fire alarm transmitter, whereby the central operator conveys the correct location to the proper companies which are to respond to any fire. One advantage of this system is the fact that any fire company in the city will know in a very few seconds after the gong starts to ring whether the fire is in its district by noting the first two digits of the alarm. Therefore, if the first two digits signifies the fact that the fire is in a certain zone, the companies which are responsible for fires in that zone will immediately prepare to leave upon ascertaining the correct location of the fire.

Another particular feature of this invention is the zoning of the city and the allotting of the different zones to the different fire companies, whereby it will assure of a proper number of companies responding to any one alarm in any one of the zones and the second and third alarm will also call out the proper number of companies in accordance with the zone in which the fire is located.

While I have shown and described the preferred embodiment of my invention, it will be apparent that slight changes may be made in the construction when putting the invention into practice without departing from the spirit of the same or the scope of the appended claim.

I claim:

A map for use in connection with a fire alarm system and adapted to be located in a central station, lines dividing the map into major zones, a different indicating number of two digits each disposed on each zone, lines indicating streets in each zone dividing the zone into blocks, a different indicating number of two digits each disposed in each block, an electric light positioned in each street for illuminating the same, and means for selectively closing the circuits through the lights whereby to locate a major zone and a particular block.

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