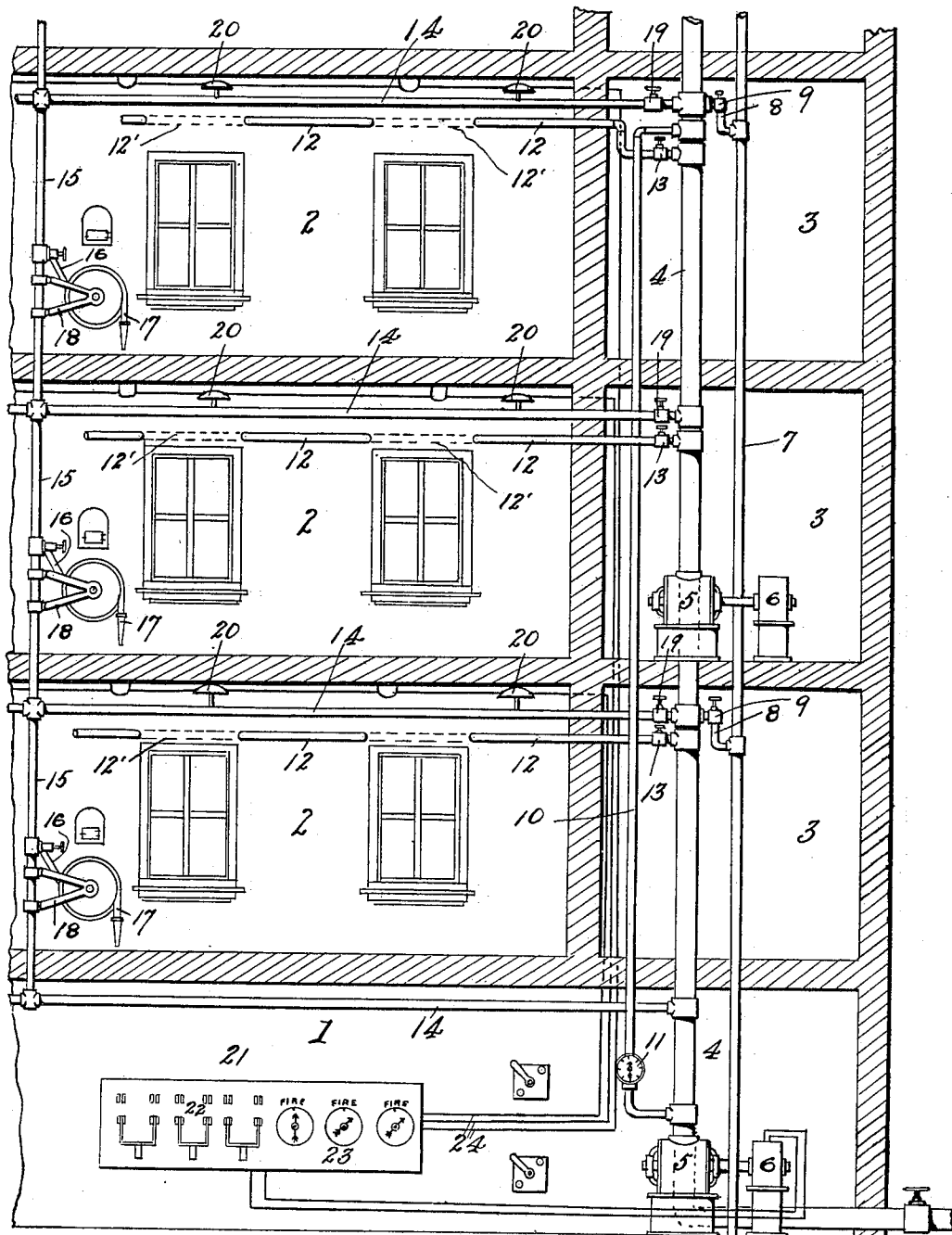


No. 825,964.

PATENTED JULY 17, 1906.

C. H. GODFREY.
FIRE EXTINGUISHING SYSTEM.

APPLICATION FILED JAN. 9, 1905.



Charles H. Godfrey, Inventor
J. M. Moore, Attorney

Witnesses

Char. H. Davis.

Mo. E. Moore

UNITED STATES PATENT OFFICE.

CHARLES H. GODFREY, OF OMAHA, NEBRASKA.

FIRE-EXTINGUISHING SYSTEM.

No. 825,964.

Specification of Letters Patent.

Patented July 17, 1906.

Application filed January 9, 1905. Serial No. 240,327.

To all whom it may concern:

Be it known that I, CHARLES H. GODFREY, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Fire-Extinguishing Systems, of which the following is a specification.

My invention relates to improvements in fire-extinguishing systems, and refers particularly to a system for instalment in buildings or structures where the fire can be extinguished in all the stories simultaneously or the fire in any one of the stories may be extinguished, as circumstances require.

The object of my invention is the provision of a fire extinguishing and protection system which may be installed in any building at a comparatively low cost and which may be operated electrically to extinguish the fire in the entire structure or in any part of it, the system being the embodiment of simplicity, durability, and inexpensiveness of construction, which can be operated instantly by any person, and which will be entirely efficient and practical in every particular.

The invention consists of a fire-extinguishing system embodying novel features of construction and combinations of parts for service, substantially as disclosed herein.

In the single figure of the drawing is represented a sectional view of a building equipped with my protecting and fire-extinguishing system, the mechanism being illustrated in elevation.

In the drawing the numeral 1 designates the basement or cellar, above which is the series of stories, rooms, or compartments 2, and to each side is the series of compartments or housings 3, in which is located the main mechanism of my system. This mechanism comprises the vertical stand-pipe 4, with which communicate the pumps 5, driven or operated by electric motors 6, and communicating with the stand-pipe at one side is the pipe 7 of smaller diameter and connected to the stand-pipe below each pump by means of a short elbow 8, and this pipe at each connection is provided with a relief-valve 9. The lower end of pipe 7 discharges into the sewer or reservoir, and its object is to test the pressure to ascertain that the pumping machinery is in working order and that all connections are in proper condition. On the other side of the stand-pipe is provided a pipe 10, the purpose of which is to show the height

of the water in the stand-pipe when the machinery is at rest, this pipe being provided with a suitable gage 11. Leading from the stand-pipe are the horizontal branches 12, which pass beyond the windows by means of elbows 12', and these pipes are provided with valves 13, and above the pipes 12 are a series of water circulating and distributing pipes 14, which communicate with the vertical pipes 15, which vertical pipes 15 have the hose connections 16 for permitting the use of the hose 17, mounted on suitable brackets 18. The horizontal and vertical water-circulating pipes are provided with controlling-valves 19, and the horizontal pipes are each provided with nozzles or sprinkling-heads 20, the purpose of which is to sprinkle or spray the water from above to all parts of the room, in addition to the supply of water from other points.

For operating my system I provide a switchboard 21, located, preferably, in the cellar or basement and provided with a series of switches 22 and indicators 23, the number of switches and indicators being determined by the number of floors in the building, and leading from the indicators and switchboard are the connections 24 for each story, as is evident.

In operation the water is retained always at the proper height and under the regular pressure in the stand-pipe, and instantly upon fire breaking out in any one of the stories or in a number of them it will be designated upon the indicator. It is then simply necessary to throw the switches into contact, which closes the circuit and operates one or all of the pumps, forcing the water through the stand-pipe into the circulating-pipes, from which it is discharged to all or any part of the structure, according to circumstances, and the fire is quickly extinguished.

It is evident that I provide a system which can be installed at a comparatively low price, all things considered, and which will instantly extinguish the fire in any part of the structure, and thus provides an efficient and thoroughly practical fire-extinguishing and protecting system. It is also evident that my system provides an equal force and supply of water for the uppermost as upon the lower story of a building, thereby permitting the fire protection to apply to an unlimited number of stories in height.

It will be observed that the series of horizontal circulating-pipes are arranged within

the structure and have the separate series of pipes, which pass outside the structure, and in this manner the water is thrown upon the fire within the rooms and on the outside of the building as well, and in this manner a proper extinguishing of the fire in a rapid manner is assured.

I claim—

In a fire-extinguishing system, the combination with a structure having a series of compartments or chambers, a stand-pipe passing through said chambers, means for supplying said stand-pipe, a pipe communicating with said stand-pipe and provided with a gage for indicating the pressure and height of water in the stand-pipe, a testing-pipe connected to the stand-pipe and provided with an outlet, two series of horizontal pipes leading from the stand-pipe at each floor of the structure, one series being pro-

vided with sprinklers, and communicating with a vertical pipe, hose connections on said vertical pipe at each floor, the other series having elbows passing outside of the structure, pumping mechanisms communicating with the stand-pipe on each floor, electrical connections to said mechanisms, a switch-board having separate switches and indicators for each floor of the structure, and electrical connections between each floor and the indicators and electrical connections between the pumping mechanisms on each floor and the switches.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. GODFREY.

Witnesses:

WILLIAM A. MESSICK,
THOMAS JOHNSTON.