C. A. PUSHECK.

PROTECTIVE DEVICE AGAINST THE SPREAD OF FIRE.

APPLICATION FILED JUNE 21, 1906.

**903,228.** Patented Nov. 10, 1908.

2 SHEETS—SHEET 1.

Fig. 1.

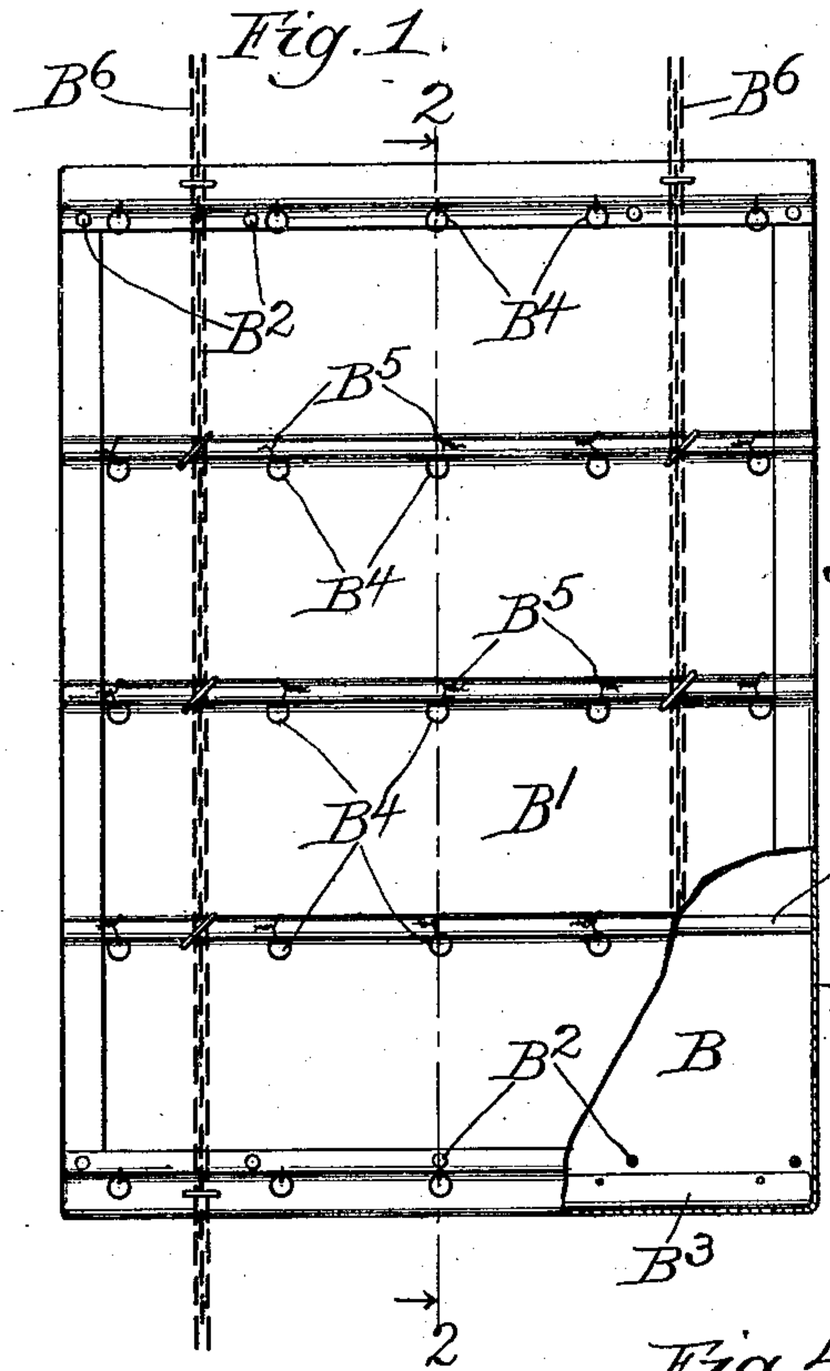



Fig. 3.

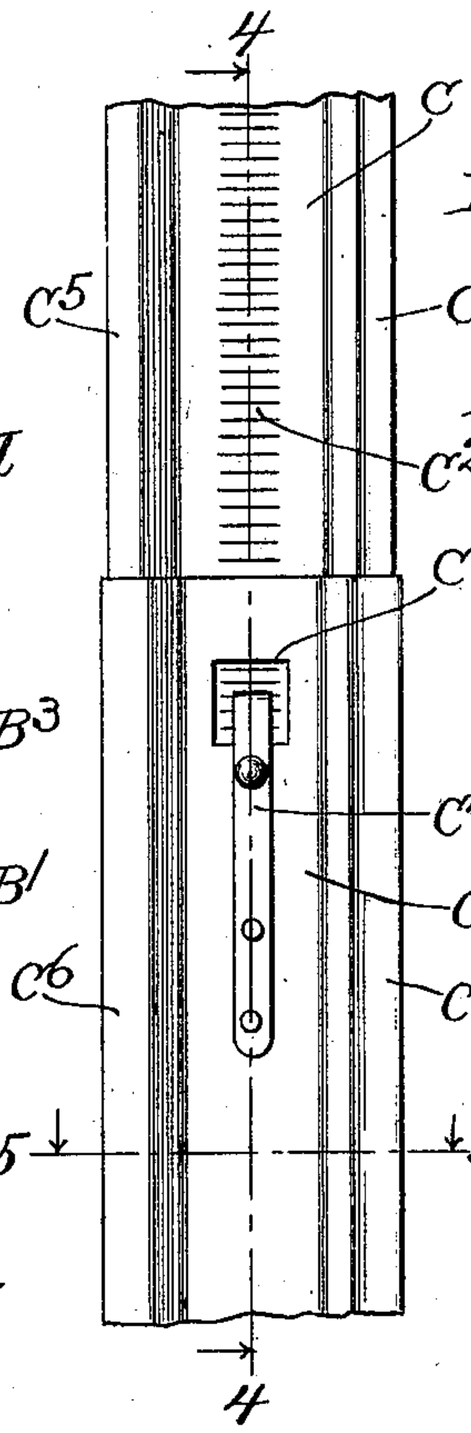



Fig. 2.

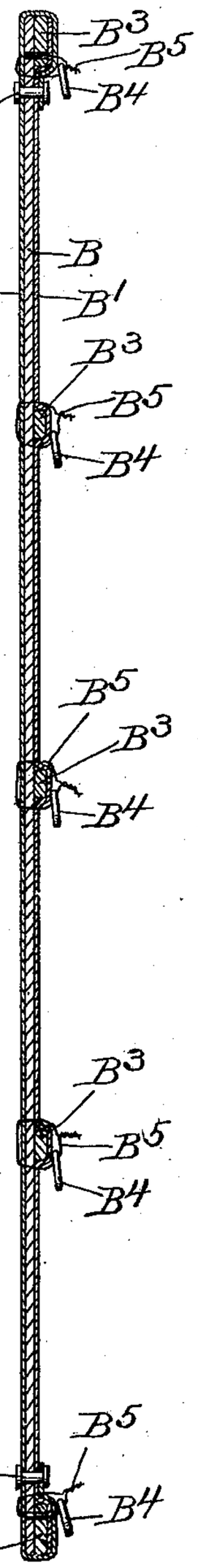



Fig. 4.

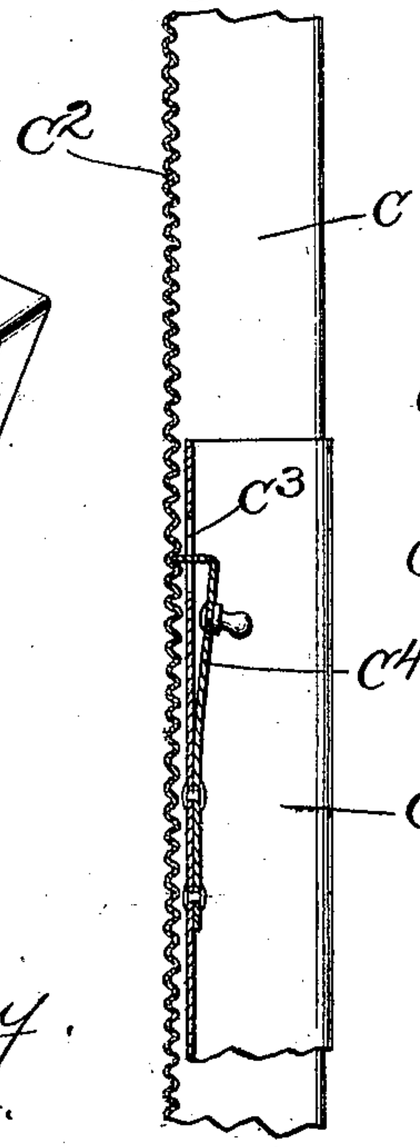



Fig. 5.

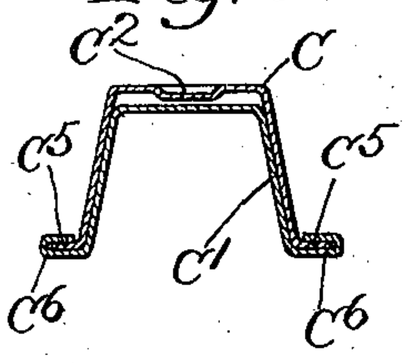
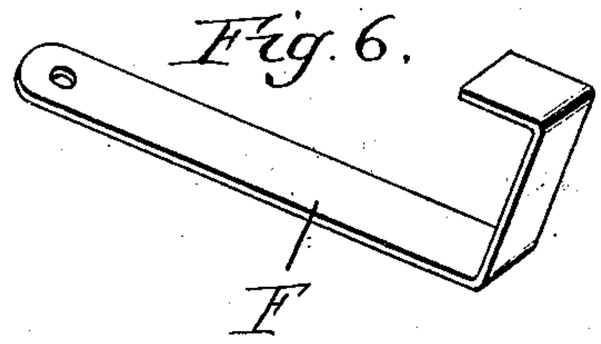



Fig. 6.

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2 SHEETS—SHEET 2.

Fig. 7.

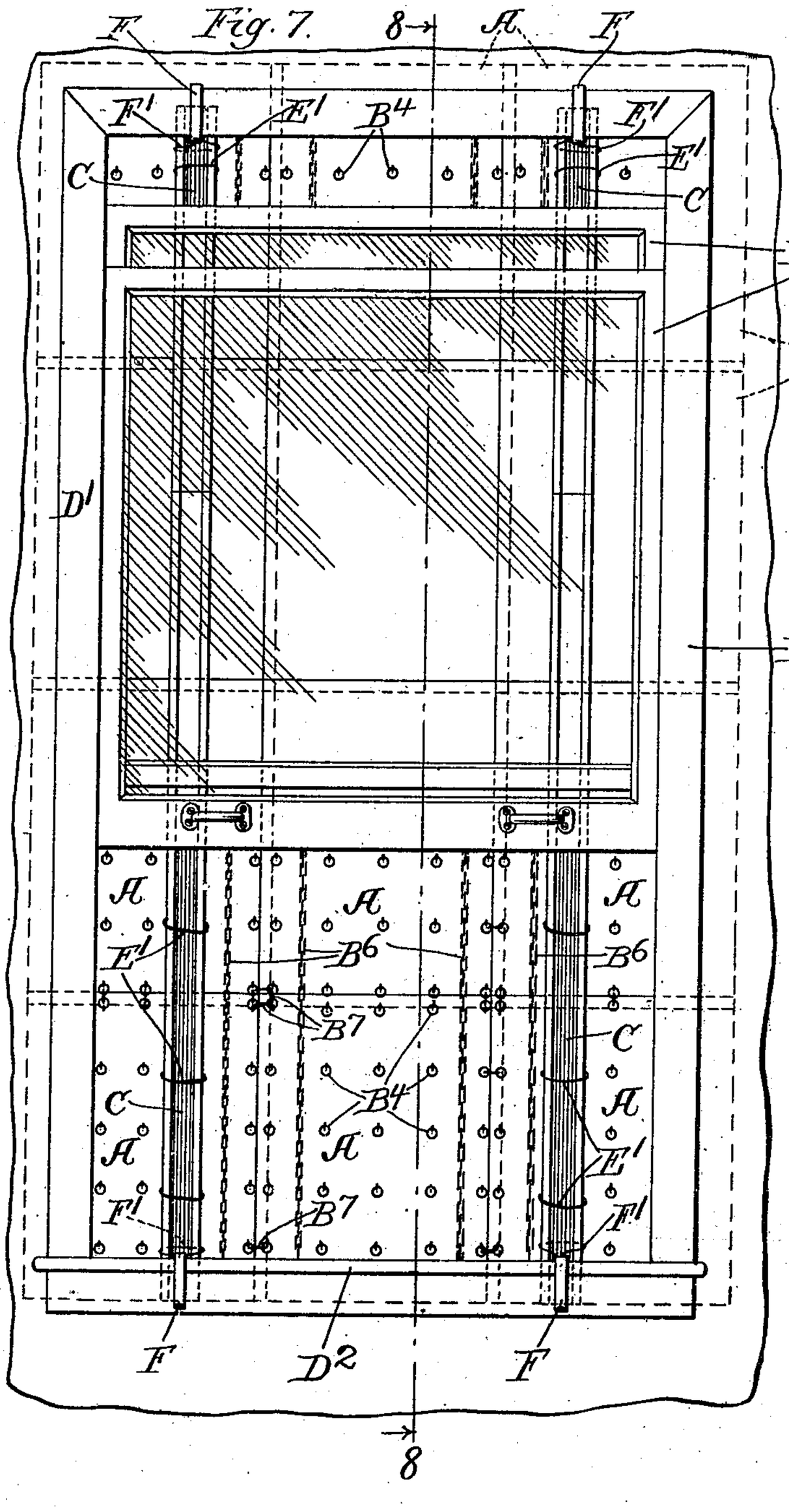
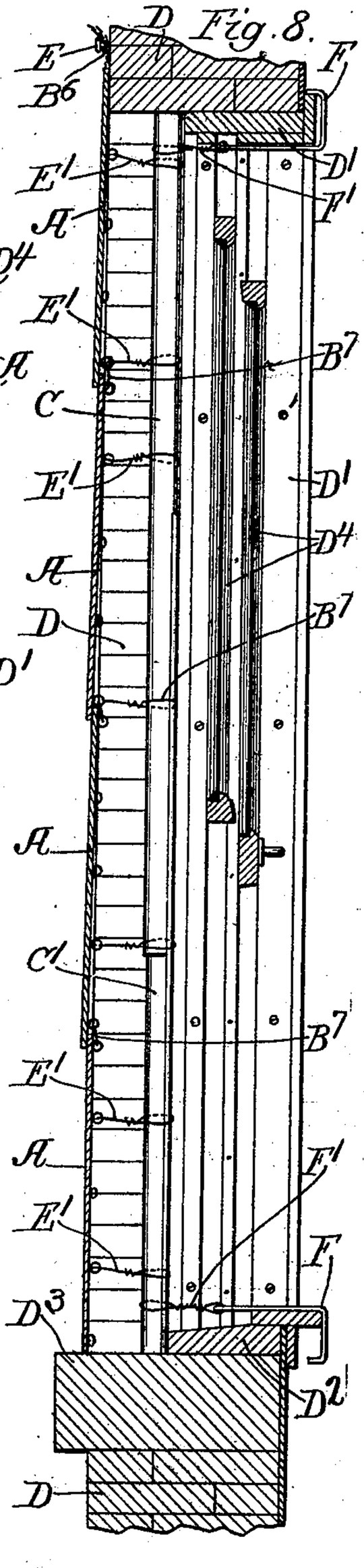



Fig. 8.

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# UNITED STATES PATENT OFFICE.

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## PROTECTIVE DEVICE AGAINST THE SPREAD OF FIRE.

No. 903,228. Specification of Letters Patent. Patented Nov. 10, 1908.

Application filed June 21, 1906. Serial No. 322,691.

*To all whom it may concern:*

Be it known that I, CHARLES A. PUSHECK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Protective Devices Against the Spread of Fire, of which the following is a specification.

My invention relates to portable devices for preventing the spread of fire, and has for its object to provide new and improved apparatus suitable for use as a protector against fire and water in a great variety of circumstances.

The device consists, generally speaking, of a fire proof covering made in sections capable of being grouped in a great variety of ways so as to form protectors or screens of different sizes and shapes. Such a device may be used in covering a window, door, store front or other wall opening, or for protecting a cornice, skylight, inflammable parts, or other portions of a building or structure, or any material or body which is exposed to injury because of the proximity of fire, or it can be used to confine fire within a building or structure. The elements of the screen or protector are provided with fastening devices so that they may be quickly assembled in the manner which will most fittingly meet the particular necessity.

The invention consists further in means for supporting the screen or protector in the desired position and in the other new and improved devices and constructions to be set forth in the following specification.

The invention is illustrated in the accompanying drawings, wherein

Figure 1 is a view of one of the elements of the protector with parts broken away to show a preferred construction; Fig. 2, an enlarged section on line 2—2 of Fig. 1; Fig. 3, a detail elevation of one form of supporting device; Fig. 4, a vertical section on line 4—4 of Fig. 3; Fig. 5, a cross section on line 5—5 of Fig. 3; Fig. 6, a detail view of one of the hooks for the upright support; Fig. 7, a view of a window taken from the inside, illustrating one application of my invention, and Fig. 8, a section on line 8—8 of Fig. 7.

Like letters of reference indicate like parts in all the drawings.

It will be obvious that my invention could be embodied in a great variety of structures differing in form, material and in other details. The adaptability to a variety of conditions is one of the essential characteristics of the device. I can, therefore, only show certain typical and preferred forms of construction indicating desirable materials and devices and suggest certain illustrative applications to use. I shall thus describe for purposes of illustration, a protector or screen made up of a number of sections or units of flexible fire proof material properly reinforced and shall show the application of such a screen to the covering of a window as shown in Figs. 7 and 8. In the drawings, these sections or units are represented generally by the letter A. A preferred form of construction of one of these sections is shown in Figs. 1 and 2. The section consists of a body of noncombustible fibrous material B. Asbestos will be suitable for this. Preferably I cover the fibrous material for strengthening purposes and to protect it from scratches and hard usage, with sheets of fire proof duck or canvas or the like, this covering being indicated by the letter $B^1$. These materials may be bound together in any desired way, as for example, by the rivets $B^2$ $B^2$. Preferably the sections are reinforced so as to give strength and weight to the screen as it is necessary, under certain conditions at least, that the screen should not be easily removed by drafts. This reinforcement I have shown as consisting of a number of cross rods $B^3$. It will be seen that the section is flexible so that it may be rolled up or laid around objects to be protected. At the same time it may be made so that its weight will prevent it from being easily moved or swayed. It is the purpose of the invention that if necessary a number of these sections should be combined or grouped together in such a manner as will best meet the particular emergency. I, therefore, provide each section with a number of fastening devices. These are placed not only at the edges but in the middles and various places of the sections and serve also as a means for supporting or holding the structure in the desired position. Any sort of fastening devices might be employed. In the drawings

I have shown a plurality of rings $B^4$ fastened to the protector by wires $B^5$ $B^5$. This form of device is merely for illustration. I also provide the sections with means for securing or hanging them in place. For example, in Fig. 1 I have shown two wires, cables or chains $B^6$ $B^6$ which may be secured at various points to the protector and thus serve also to reinforce the structure and to hold it in the desired position.

It will be understood that the sections may be secured together in any desired manner, for example, the rings on one section may be wired or otherwise fastened to corresponding rings on the other sections so as to make up a screen or protector of the desired conformation or size. The connecting wires are shown at $B^7$ in Figs. 7 and 8. The protector may then be hung over or in front of the object or opening to be protected by means of the chains $B^6$ or the rings $B^4$, or otherwise as is most convenient. In certain circumstances it will be best to use some supporting device in connection with the protector. In Figs. 3 to 6 inclusive I have shown the details of one form of a device of this character. It consists of an extensible rigid standard composed of two or more collapsible sections. In Fig. 3, for example, I have shown two channeled sections C, $C^1$, the latter fitting into the channel of the former. The section C is provided with the ratchet teeth or corrugations $C^2$. The section $C^1$ is apertured at $C^3$ and has the elastic clip $C^4$ extending through the aperture and engaging with the ratchet teeth $C^2$. Preferably the section C has the flanges $C^5$ $C^5$ which extend into pockets formed by bending over the material forming the flanges $C^6$ $C^6$ of the section $C^1$. It will be obvious that the sections may be drawn out to any desired extent and there held by means of the clip.

In Figs. 7 and 8 I have illustrated a typical application of my device to use. In these figures, D represents the brick work of a building, $D^1$ the window frame, $D^2$ the sill of the frame, $D^3$ the outer window sill, and $D^4$ $D^4$ the upper and lower sashes. It is a well known fact that the spread of fire in closely built neighborhoods is often due to a very large extent, to the fact that the glass of windows in buildings adjacent to the conflagration cracks under the intense heat and when this occurs the inward draft carries the flames or heat into the building and thus causes the spread of a fire which otherwise might perhaps be controlled. In Figs. 7 and 8 I have shown a means for completely covering or protecting a wall opening of this sort. The protector, when the elements are assembled in proper number, can also be hung from the outer wall, for example, by nails E, or from the roof or upper openings, or otherwise. It may also be supported and held against the possibility of being moved by a draft or otherwise by use of the upright standards described above. One of these standards is shown at C, $C^1$. The protecting screen may then be wired to the standard by means of wires $E^1$ $E^1$ extending from the rings $B^4$ around such standard. In order to hold the standard in position I may use nails or the hooks F which may be connected with the standards by any desired means, for example, by the wires $F^1$ $F^1$. It would be a very easy matter to set up a protecting screen of this sort. The standards would first be placed on the outer sill $D^3$ and then extended until the upper section abuts against the brick work at the top of the window, the sections being then fastened in position by the wires or other fastening device. This method of procedure would, of course, have to be varied according to the emergency to be dealt with. It will be obvious that my apparatus contains within itself the means for a very wide application to actual needs and uses. I, therefore, wish it to be understood that I do not desire to be limited to the exact materials, details of construction or use described for obvious modifications will occur to any person skilled in the art.

I claim:

1. A protective device against fire comprising a section or unit consisting of a body of asbestos and on each side thereof sheets of fire proof canvas secured together, a plurality of cross rods on the inside of said unit, a plurality of fastening rings secured at intervals to the reinforcing rods, and chain secured to the unit and running at right angles to the reinforcing rods.

2. An adjustable protective device against fire comprising a plurality of separable overlapping units consisting each of a body of asbestos and on each side thereof sheets of fire proof canvas secured together, a plurality of cross rods contained within the unit, and a plurality of fastening devices secured at intervals to one side of each of the units so that said units may be overlapped at the top, bottom and sides for different distances, one upon the other, to form a protective curtain of varying size to fit tne required place to be protected.

3. An adjustable protective device against fire, comprising a plurality of separable overlapping units of fire proof material, with a plurality of fastening devices on each of the units at the edges thereof and at various intermediate points so that the units may be overlapped for various distances, one upon the other at their top and bottom and at the sides so as to combine the same into a protective curtain of varying size and shape.

4. An adjustable protective device against

fire, comprising a plurality of overlapping flexible units of noncombustible material reinforced by rigid reinforcements, a plurality of fastening devices on each of the units at the edges thereof and at various intermediate points so that the units may be overlapped for various distances one upon the other at their top and bottom so as to combine them into a protective curtain of varying size and shape.

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