To all whom it may concern:

Be it known that I, MARGUERITE L. SOBRA, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fire-Escape Attachments, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to fire escapes and has for its object the production of an efficient fire escape of the ladder type which may be conveniently adjusted to a house, or other building within a minimum amount of time.

Another object of this invention is the production of an efficient support for carrying the escape basket which is adapted to hang from the upper end of the ladder.

With these and other objects in view, this invention consists of certain novel constructions, combinations and arrangements of parts as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a front elevation of the device in an operative position. Fig. 2 is a side elevation of the device illustrated in Fig. 1. Fig. 3 is a top plan view of the device as shown in Fig. 1. Fig. 4 is a detail perspective of the carrier basket. Fig. 5 is a plan view of the carrier basket showing the same in a collapsed condition. Fig. 6 is a perspective view of the carrier basket in its folded condition. Fig. 7 is a detail perspective of the upper end of the ladder, showing the manner of attaching the bracing hook thereto.

By referring to the drawings, it will be seen that the mechanism comprising the fire escape consists in a ladder 1, having at its upper ends the usual hooks 2, for engaging the window sill and the top or sides of a building. This ladder is provided near its upper end with a hinged carrier basket support 3 which support is braced by means of an angle web portion 4. The web portion 4 is preferably formed integral with the carrier basket supporting arm 3, and is hinged to the side of the ladder by means of hinges 5.

This carrier basket support is adapted to be folded in back of the ladder or in the position as shown in dotted lines in Fig. 1 so that the ladder may be conveniently carried from place to place without the carrier basket support being in the way of foreign objects. This carrier basket support is provided at its outer end with a bracing arm or rod 6 which arm or rod is provided with a hooked end 7, and this arm when the carrier basket supporting arm 3 is in its extended position passes in back of the carrier basket support and in back of the ladder so as to have the hooked ends 7 engage an eye 8 formed upon the opposite side member of the ladder. In this manner, the bracing arm or rod 6 will constitute a very efficient brace by passing in back of the carrier basket support 3.

By carefully considering Fig. 1, it will be seen that the brace or angle web portion 4 extends for approximately half the width of the basket supporting arm 3 and extends at an angle so as to form an efficient brace at the point from which the carrier basket is suspended.

A supporting hook 9 is carried intermediate the ends of the carrier basket support 3, and is adapted to engage the window sill for holding the arm in engagement therewith, and this hook is so placed as to form an efficient brace for the support at the point from which the carrier basket is suspended.

A pulley 10 is journaled upon the carrier basket support intermediate its end and preferably directly below the hook 9, and a second guide pulley 11 is journaled near the inner end of the basket support 3. A drum 12 is associated with the ladder 1, and upon this drum 12 is wound a carrier basket supporting cable 13, which cable passes over the pulleys 10 and 11 and engages the supporting ring 14 of the carrier basket. Diverging cables 15 are connected to the ring 14 and these cables engage the collapsible sides 16 of the carrier basket. This carrier basket is collapsible so that the same may be folded as illustrated in Fig. 6. The side sections 16 of the carrier basket are hinged to the bottom 17 by means of lacing cables 18. These lacing cables are formed of metallic strands or may be otherwise formed and the carrier basket may be formed of any desired metal. The bottom 17 is provided with a padding 19 as illustrated in Fig. 5. Reinforcing cleats 20 are formed upon the outer end of the sides 16 and upon these cleats are formed the eyes 21, which eyes are engaged by means of the hooks 22.
The sides 16 of the carrier basket when in their set up position are so held in this position by means of a chain 28 which passes through the eyes 24 of chain corners of each side section 16.

In this manner a very efficient and durable device has been produced which may be set up quickly and may be easily transported from place to place, The chain 28 is adapted, at all times, to be secured to the side sections 16 of the carrier basket, and is provided with a hook 25 for engaging one of the links of the chain for holding the sections in their correct set-up position.

From the foregoing description, it will be obvious that a very efficient and durable device has been produced which may be set up quickly and may be easily transported from place to place, as for instance the device may be easily carried upon a truck as is the custom with the ordinary ladders now in use. The ladder 1 may be formed of the ordinary construction, and is provided with the usual side cleats 26.

When the carrier basket support is folded upon the ladder, the hook 5 may hang down to the side of the ladder and thereby be out of the way of foreign objects as is illustrated in Fig. 1 of the drawings in dotted lines.

Of course, it should be understood that the hinged arm 6 is secured to the carrier basket supporting member by means of a universal joint to allow the hook to swing downwardly when the carrier basket is folded upon the ladder.

Of course, it should be understood that this invention may be modified in its detail mechanical construction without departing from the spirit of the invention.

What is claimed is:

1. A fire escape of the class described, comprising a ladder, a carrier-basket-supporting arm hingedly secured to one side of said ladder, said carrier-basket-supporting arm being of the same thickness as said ladder and having its inner end resting against the side of said ladder, whereby outward swinging of said carrier-basket-supporting arm will be limited, and a bracing arm hingedly secured to the outer end of said carrier-basket-supporting arm for firmly holding said carrier-basket-supporting arm in an extended position and preventing the backward folding of said carrier-basket-supporting arm.

2. A fire escape of the class described, comprising a ladder, a carrier-basket-supporting arm hingedly secured to said ladder, a diagonally extending brace hingedly secured to one side of said ladder and extending approximately one-half the length of said carrier-basket-supporting arm for reinforcing said carrier-basket-supporting arm, and means hingedly secured to the rear of said carrier-basket-supporting arm for preventing backward folding of said arm when the same is in an operative position.

3. A device of the class described comprising a ladder, a carrier-basket-supporting arm hingedly secured to said ladder, a bracing arm hingedly secured to the outer end of said carrier-basket-supporting arm and extending across the back of said carrier-supporting arm, said brace member adapted to detachably hold said carrier-basket-supporting arm against the backward folding movement while the same is in an operative position, said carrier-basket-supporting arm carried by said carrier-basket-supporting arm and said ladder for gripping a portion of a building for holding said ladder in a correct position, pulleys carried by said carrier-basket-supporting arm, a cap passing over said pulleys, and a carrier-basket supported on said cap for allowing the escape of a person from a burning building.

4. In a fire escape of the character described, the combination of a ladder, a carrier-basket-support hinged to said ladder, a pulley journaled to the support, a hook extending from the support, a bracing arm with a hooked end and with the other end hinged to the swinging end of the carrier-support, a ring on the ladder to engage said hooked end, a cable engaging said pulley, and a carrier-basket for said cable.

5. A fire escape of the class described comprising a ladder, a carrier-support secured thereby, a hinged arm secured to said carrier-support and engaging said ladder at its opposite end for holding the carrier-support in an extended position.

6. A fire escape of the class described comprising a ladder, a carrier-support hinged to said ladder and capable of being swung upon the ladder so as to lie against the same, a brace arm hingedly secured to the outer end of said carrier-support engaging said ladder for firmly holding said carrier-support in its extended position and capable of being swung so as to lie against the side of a ladder when said carrier-support is folded against said ladder.

7. A fire escape of the class described comprising a ladder, a carrier-support hingedly secured to said ladder and provided with a diagonally extending brace, a transversely extending bracing arm secured to said support and adapted to engage said ladder for bracing said arm, and a carrier secured to said support and capable of being raised and lowered thereby.

8. A fire escape of the class described comprising a ladder, a carrier-support hingedly secured to said ladder, bracing means therefor hinged to the carrier-support, a carrier, pulleys carried by said carrier-supporting arm, and a cable passing over said carrier.
pulley and engaging said supporting arm for the strain upon said cable to be taken up by the bracing means adjacent its point of connection with said ladder.

9. In a fire escape, the combination with a ladder, of a basket-supporting arm hinged thereto to swing vertically back and fold upon the ladder, a bracing arm connected to the ladder and also connected to the basket-supporting arm, together with engaging hooks carried by the basket-supporting arm, and means for locking the basket-supporting arm and the bracing arm when the basket-supporting arm and bracing arm are folded back upon the ladder.

10. In a fire escape of the character described, the combination of a ladder, a carrier-basket support hinged to said ladder, a hook or hooks carried by said support, a bracing arm at one end hinged to the swinging end of the carrier-support and having a hooked end on the end thereof, means on the ladder to lock with said hooked end, and means to swing said carrier-basket to said ladder.

11. In a fire escape of the character described, the combination of a ladder, a swinging carrier-basket support hinged to said ladder, a hook or hooks carried by said support, and means to lock said support in operative position.

12. In a fire escape of the character described, the combination of a ladder proper having engaging hooks thereon, of a carrier-basket support hinged to said ladder at the side and upper end thereof and adapted to swing back and fold upon the ladder, a hook or hooks carried by said hinged support, and means to lock said support in operative and extended position.

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

MARGUERITE L. SOBRA,

Witnesses:

IRVING L. MCCATERAN,
ROSS J. WOODWARD.