

(No Model.)

J. D. WEED.
FIRE ESCAPE.

No. 277,389.

Patented May 8, 1883.

Fig. 1.

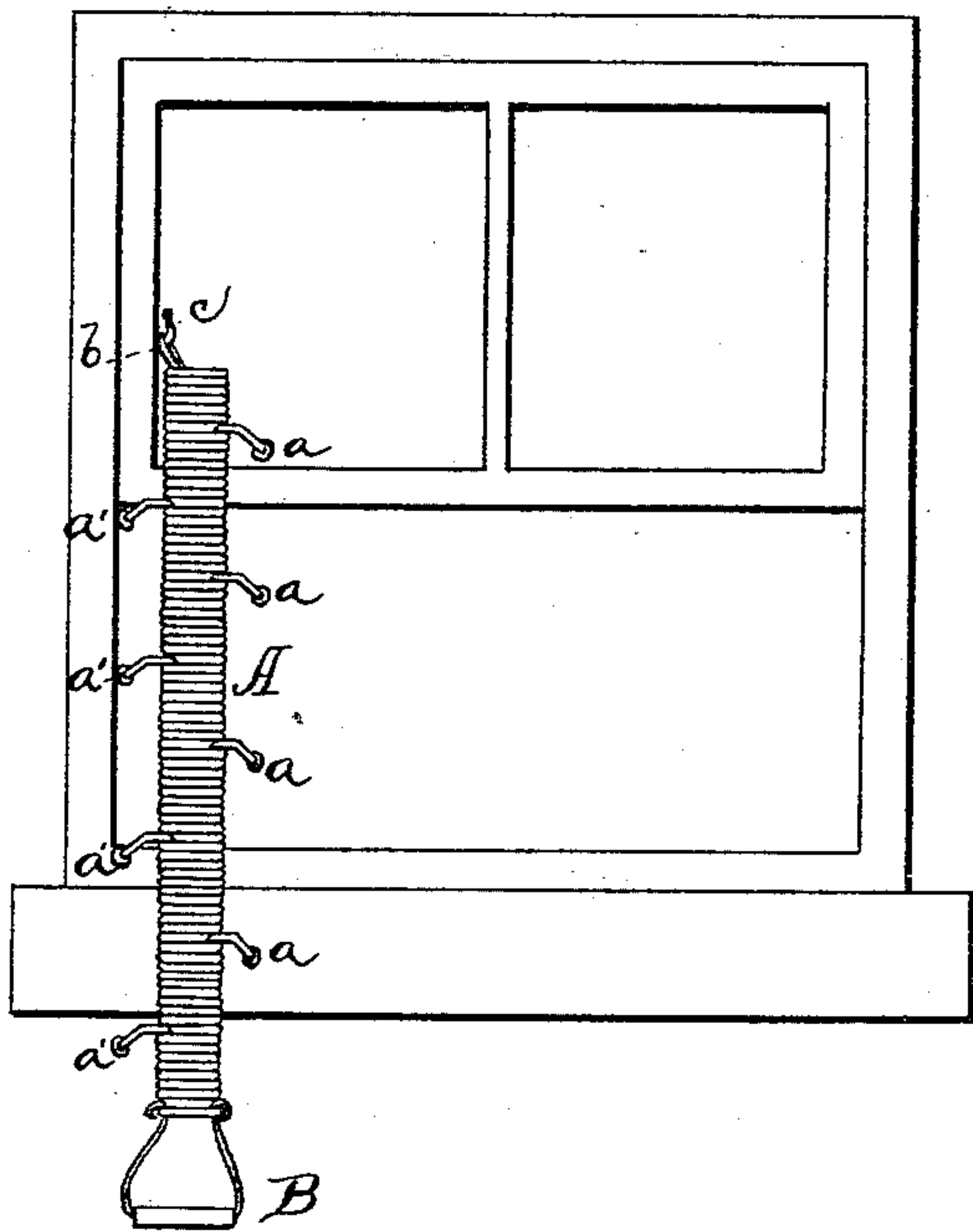
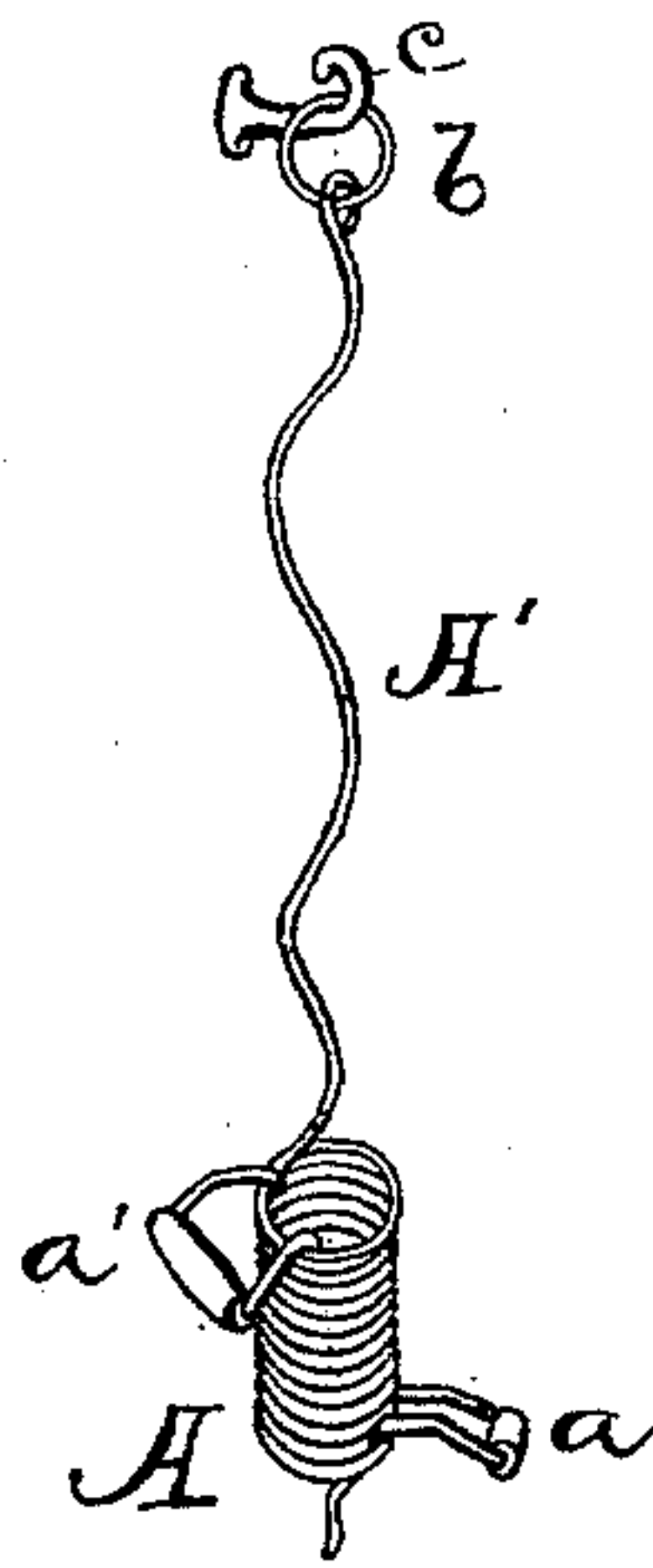


Fig. 2.



Witnesses:

D. H. Parsons.
J. R. Drake.

John D. Weed,
Inventor, by
J. R. Drake, Atty.

UNITED STATES PATENT OFFICE.

JOHN D. WEED, OF BUFFALO, NEW YORK.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 277,389, dated May 8, 1883.

Application filed February 5, 1883. (No model.)

To all whom it may concern :

Be it known that I, JOHN D. WEED, a citizen of the United States of America, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of this invention is to get a simple, inexpensive, and effective device for use in high buildings—such as hotels, tenement-houses, &c., but more especially in hotels—to save life in case of fire. It is intended to supply each room with one, either attached to a window-casing or the wall, or else in a neat box close to the window, and therefore ready for immediate use; and the invention consists in a tightly-coiled steel wire of sufficient strength to sustain a weight or strain of at least five hundred pounds—the wire known as “No. 8,” for example—and supplied, say, every twenty coils with a projecting handle, one at the right hand and the next at the left hand—say twenty coils below the first—and so on, every twenty coils representing a fall or stretch of about six feet, the bottom or end of the coil having attached thereto a stirrup or rest for the feet, and the upper end of the coil terminating in a loop or ring for hooking or hanging the device to a strong hook firmly fastened or driven into the window-casing or wall, and at a proper height to allow of a person stepping onto the sill, taking hold of the upper handle, and putting one or both feet into the stirrup at the bottom, and then swinging off, all as fully hereinafter explained.

In the drawings, Figure 1 is an elevation of the escape attached to a window-casing; Fig. 2, a perspective of the upper part, showing the wire coil stretched out for one length above the first handle.

A represents a length of coiled steel wire—say of size No. 8—(and having been coiled tightly over a $1\frac{1}{2}$ rod, to give good-sized and strong convolutions or rings,) the length of the whole, when coiled, to vary from about four to six feet. One, when tightly coiled, and say five feet long, would give an expansion or stretch of about eighty feet. Of course the lengths would be longer or shorter, according to the height from the ground of the story in which

they were placed. At the top of the length is firmly attached a strong loop or ring, *b*. This is, in use, hung onto a strong hook, *c*, driven into the casing or wall by the window, which should be there permanently. Just below the first—say twenty coils—is attached in the wire a projecting handle, *a*, standing out from the coils, having a broad hold to give the hand a strong grasp thereon, the ends of said handle so attached as not to prevent the expansion of that or any part of the coil. About twenty coils below the first handle, and on the opposite side, is another handle, *a'*, for the left hand, and twenty coils below, at the opposite side, is another handle, *a*, and so on to near the bottom of the device, which terminates in a metal stirrup, *B*, either for one or two feet to be put therein. This stirrup is very important, as it takes off about one-half the weight from the hands of the user, and also provides an efficient resting-place for the foot, (or feet,) thereby giving greater confidence to the individual about to trust himself thereto, as usually only a strong or experienced man can lower himself by the hands alone.

The operation is as follows: If the device is in a box, it is readily hung on the hook *c*, (as its entire weight is only from eight to ten pounds,) at a sufficient height to enable the user to grasp the upper handle, *a*, with one hand and the handle *a'* with the other, at the same time putting one or both feet in the stirrup *B* and then swinging clear of the window. This gives a gentle fall of six feet. Then, letting go of the first handle, *a*, the lengths between the first and second handles would then expand another six feet. Then, letting go of that handle, after having first grasped the next one with the other hand, another fall of six feet is given, and so on to the bottom or ground. Only the lengths used by the hands will expand, those near the feet “giving” hardly any. Care should be taken to grasp the upper handle and put the feet in the stirrup at the same time before swinging out. By having more coils one hundred or more feet can be easily reached; but these lengths would be seldom required.

By this device no jerk can be given, nor is there any rebound or contraction of the spring after expansion, which, when expanded, leaves

the wire or coils nearly straight. It is effective, simple, and cheap.

I claim—

5 As a fire-escape from high buildings, a suitable length of strong metal wire coiled into a tight continuous spring, A, having a series of projecting handles, *a a'*, attached or fastened to the rings or convolutions of said spring, equidistant from each other, the spring termi-
10 nating in a stirrup or foot-receptacle, B, the upper end of the coil or spring having a loop

or ring for attaching the whole to the window or wall of a building, all arranged and operating substantially in the manner and for the purpose specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 30th day of January, 1883.

JOHN D. WEED.

Witnesses:

J. R. DRAKE,
T. H. PARSONS.