July 24, 1956 O. H. EDWARDS 2,755,981

ROOF LADDER

Filed Oct. 1, 1952 2 Sheets-Sheet 1

Fig. 1

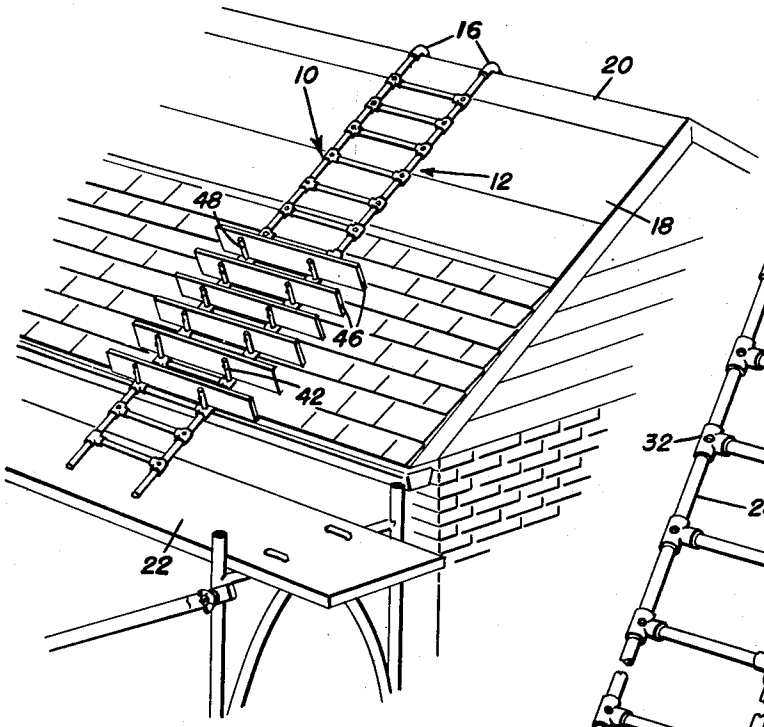


Fig. 4

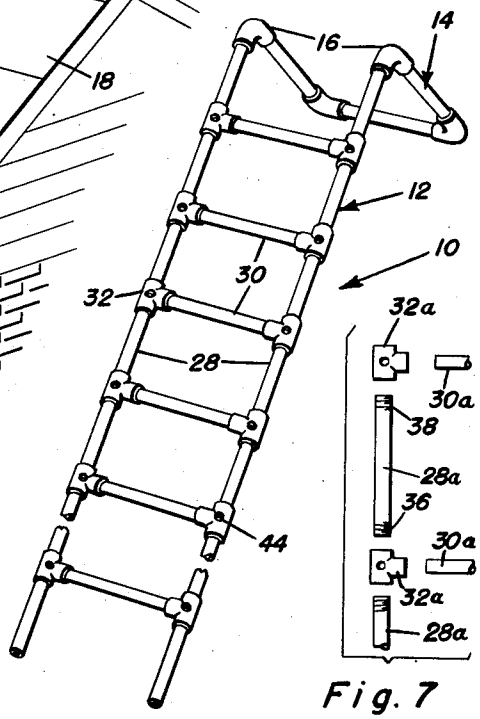


Fig. 7

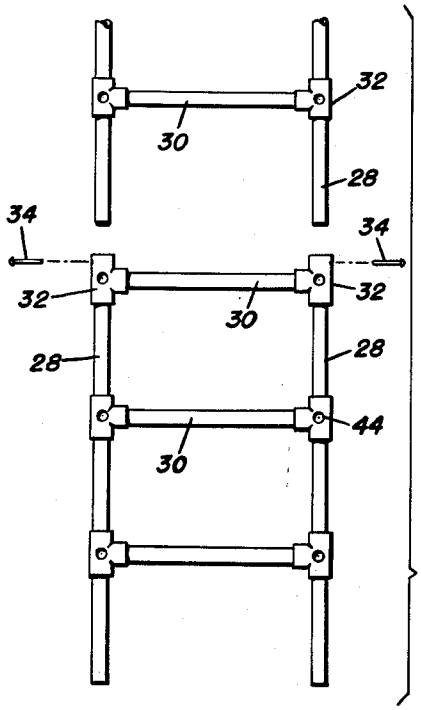
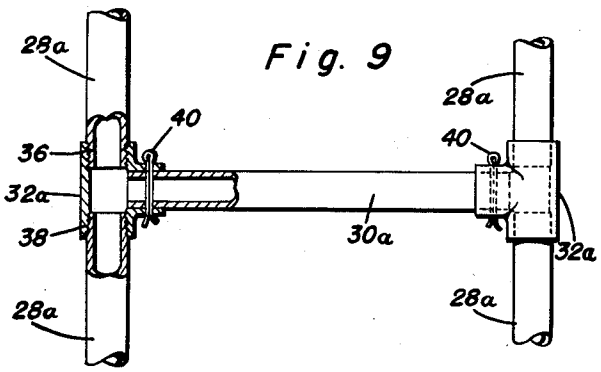


Fig. 6

Fig. 9



Omer H. Edwards

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

July 24, 1956 O. H. EDWARDS 2,755,981

ROOF LADDER

Filed Oct. 1, 1952 2 Sheets-Sheet 2

Fig. 3

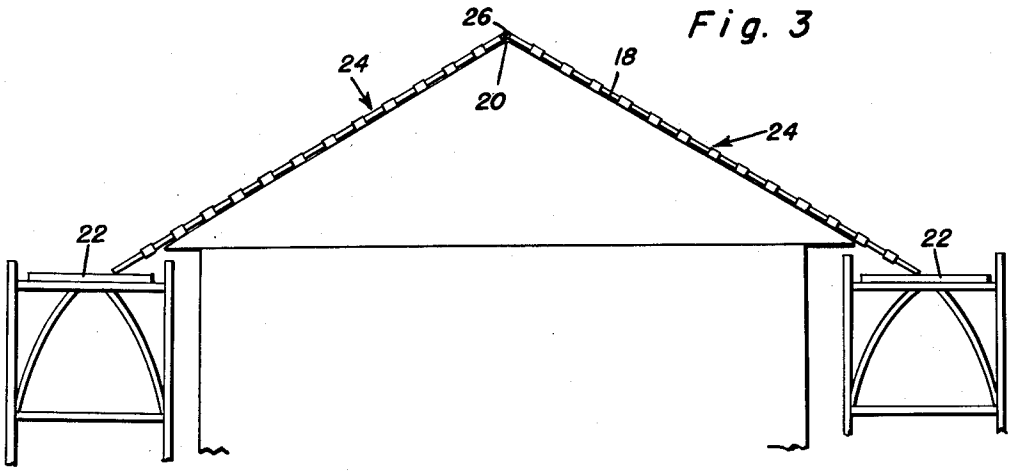


Fig. 5

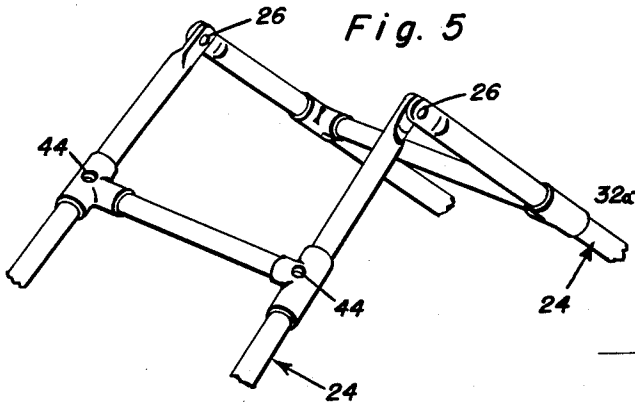


Fig. 8

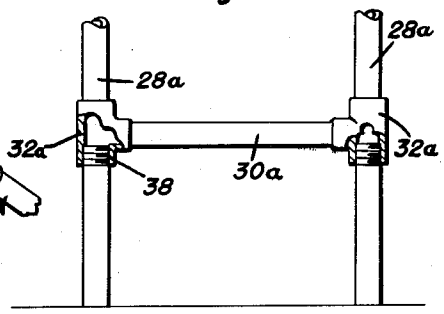


Fig. 11

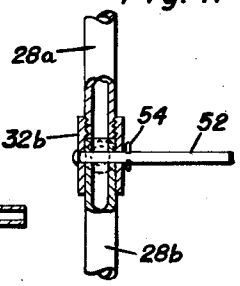
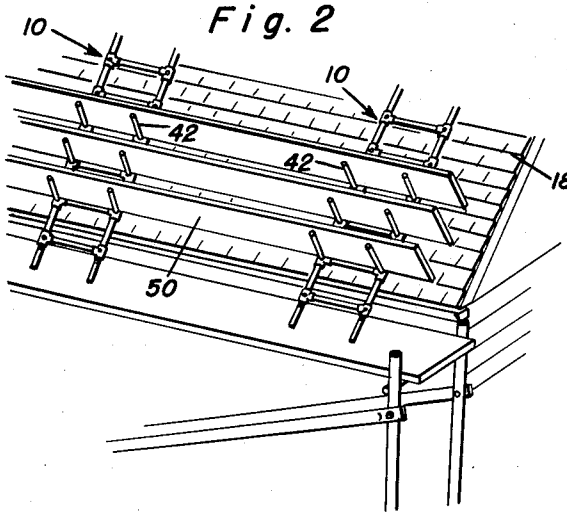


Fig. 2



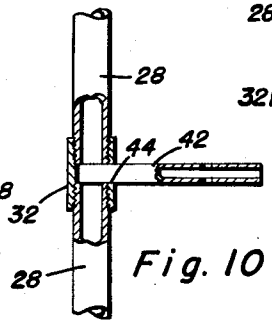


Fig. 10

Omer H. Edwards

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

United States Patent Office 2,755,981 Patented July 24, 1956

2,755,981

ROOF LADDER

Omer H. Edwards, Stamford, N. Y.

Application October 1, 1952, Serial No. 312,558

1 Claim. (Cl. 228—51)

This invention relates to new and useful improvements and structural refinements in roof ladders, and the principal object of the invention is to provide a ladder of the character herein described, which may be conveniently and effectively employed for gaining access to the roof of a building while installing shingles, undertaking repairs, and the like.

An important feature of the invention resides in the provision of means for sustaining the ladder in position on a roof by virtue of its supportable engagement with the roof ridge.

Another feature of the invention resides in its discerptibility, whereby the ladder assembly may be readily separated into a plurality of easily manipulable sections and whereby the length of the ladder may be increased or decreased as required for the work.

Some of the advantages of the invention lie in its simplicity of construction, in its efficient and dependable operation and its adaptability to economical manufacture.

With the above more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the invention in use;

Figure 2 is a fragmentary perspective view illustrating a slightly modified arrangement of the invention;

Figure 3 is an end elevational view showing the invention positioned on a roof on both sides of the roof ridge;

Figure 4 is a perspective view of a ladder adapted to be positioned on only one side of the roof ridge;

Figure 5 is a fragmentary perspective detail illustrating the pivotal connection between the ladder sections shown in Figure 3;

Figure 6 is a group plan view illustrating one form of separable connection between the ladder sections;

Figure 7 is a fragmentary group plan view illustrating another modified form of the ladder;

Figure 8 is a fragmentary plan view of an arrangement similar to that shown in Figure 7;

Figure 9 is a fragmentary plan view, partially broken away, illustrating a further modified arrangement of the ladder, and

Figures 10 and 11 are fragmentary details showing two different arrangements of the foot board supporting pins used in the invention.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, more particularly to Figures 1 and 4, the roof ladder is designated generally by the reference character **10** and consists of a relatively long section **12** and a relatively short section **14** which is rigidly connected to the long section by suitable elbows **16**, so that when the ladder is positioned upon a roof **18**, the short section **14** may

overhang the roof ridge **20** so as to sustain the long section **12** in position.

The lower end of the section **12** may rest upon a suitable scaffold **22** so that the ladder section **12** is sustained in upwardly spaced relation from the surface of the roof itself, whereby shingles may be secured in place on the roof without interference from the ladder.

In a slightly modified arrangement of the invention (see Figures 3 and 5), the ladder may be composed of two sections **24** of substantially equal length and pivotally connected together at the upper ends thereof as indicated at **26** so as to effect an angular adjustment for roofs of different pitches. It should be understood, of course, that in this arrangement the two ladder sections **24** are disposed at the opposite sides of the roof ridge for working on both sides of the roof, and that the pivots **26** permit the two sections to be adjusted angularly relative to each other as desired.

Referring now to the accompanying Figure 6, the ladder is preferably constructed from sections of pipe forming a pair of side members **28** and a plurality of rungs **30** which are connected to the side members by T-couplings **32**. The ladder is of a discerptible nature so that it may be built-up in any desired length, this being achieved by slip-fitting the pipe sections of the side members **28** into the couplings **32** and removably securing the same together by means of pins **34** which are extended through the couplings **32** and through the sections of the side members **28**.

In a modified form of construction shown in Figures 7, 8 and 9, the side member elements **28***a* are provided at the opposite ends thereof with left and right hand screw threads **36**, **38** for coaction with corresponding threads in the couplings **32***a*, while the rungs **30***a* are secured in the couplings **32***a* by removable cotter pins **40**.

As is illustrated in Figure 10, the couplings **32** or **32***a* are provided with apertures to accommodate upwardly projecting pins **42** (the pin receiving apertures being illustrated at **44**) and upstanding foot boards **46** may be secured to the pins **42** by suitable fastening elements **48**. (See Figure 1.)

Alternatively, as shown in Figure 2, two ladder units **10** may be positioned on the roof in spaced parallel relation and relatively long planks **50** may be substituted for the foot boards **46** so as to extend between the two ladders, longitudinally of the roof, as illustrated.

In the arrangement shown in Figure 10, the pin **42** in each coupling is positioned between the adjacent ends of the side member sections **28***a*, while in a modified form of the invention shown in Figure 11, a similar pin **52** extends transversely through the coupling **32***b* and through one of the side member sections **28***b* which is slip-fitted into the coupling and is held in place by the pin **52**. A cotter pin **54** may be provided on the pin **52** to sustain the latter in place, while the connecting side member section **28***a* is screw threaded into the coupling in the conventional manner.

It is believed that the advantages and use of the invention will be clearly understood from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

A discerptible ladder for use on a roof comprising a pair of rigid side members, each of said side members

including a plurality of sections, a coupling fixed to one end of each of said sections, the end of an adjacent section being telescopingly received in said coupling, said coupling and said section having aligned openings, a pin extending through said openings for securing said sections together, transversely extending rungs detachably connected between said side members, said pins extending transversely to said side members and to said rungs, said pins having a transverse opening therein and a fastener extending through said opening.

References Cited in the file of this patent

UNITED STATES PATENTS

267,031	Spelman	Nov. 7, 1882
829,527	Holmes	Aug. 28, 1906
878,695	Walter	Feb. 11, 1908
988,808	Parris	Apr. 4, 1911
1,044,889	Hyde	Nov. 19, 1912
1,088,128	Cleary et al.	Feb. 24, 1914
2,007,496	Hurlbut	July 9, 1935
2,341,510	Born	Feb. 15, 1944
2,623,794	Osten	Dec. 30, 1952

FOREIGN PATENTS

182,345	Great Britain	July 6, 1922
49 628	Denmark	Dec. 10, 1934