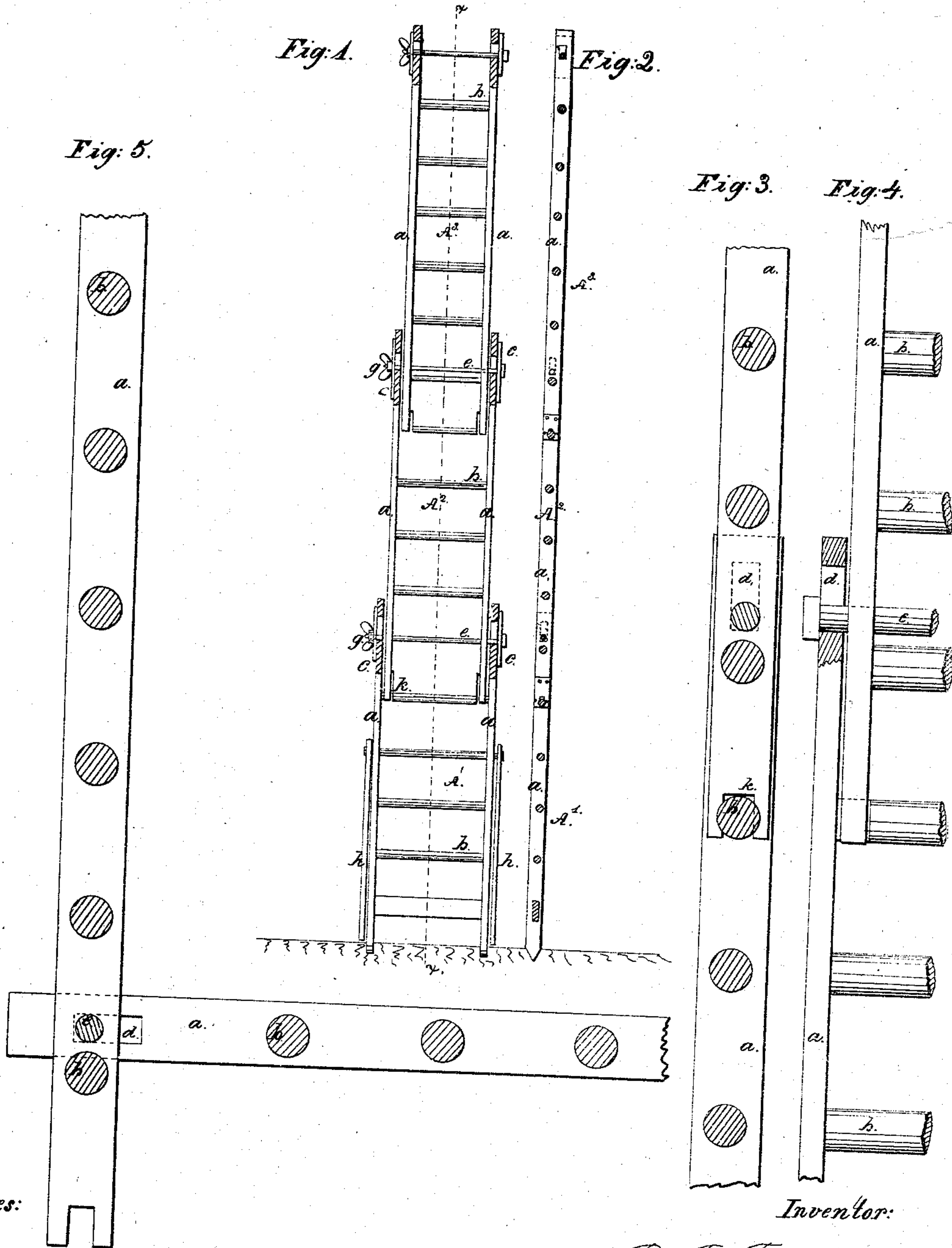


B. F. Turner

Ladder.

N^o 66,655.

Patented Jul. 9, 1867.



Witnesses:
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BENJAMIN F. TURNER, OF BRIDGETON, NEW JERSEY.

Letters Patent No. 66,655, dated July 9, 1867.

IMPROVEMENT IN LADDERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, BENJAMIN F. TURNER, of Bridgeton, in the county of Cumberland, and State of New Jersey, have invented a new and useful Improvement in Ladders; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents my improved ladder extended at full length.

Figure 2 is a longitudinal section, taken in the line *x x*, fig. 1.

Figure 3 is a partial longitudinal section showing the connection of two lengths enlarged.

Figure 4 is an enlarged front view of the same parts partly in section.

Figure 5 is an enlarged view of the same in a different position.

Similar letters of reference indicate like parts.

This invention relates to an improvement in ladders for connecting several short lengths of separate ladders in such manner that they may be readily and safely extended, to be used as one long ladder for a high elevation, or may be doubled upon each other, to be used as a scaffold or as a stage ladder, and thus be employed for various useful purposes and folded together, as desired.

$A^1 A^2 A^3$ represent separate ladders or lengths, which may be used singly or be connected to form one combined ladder, to be elevated in a straight line with other, or placed at different angles to be used for different purposes. The two outside lengths may be placed perpendicularly to support the middle length horizontally, in which position they serve as a scaffold, which may be readily elevated and will be very strong and convenient, or they will form a step-ladder, by placing one end length on the ground, and raising the other two lengths to form a triangle. These several positions in which my improved ladder may be placed easily render it extremely useful and convenient for many different purposes. The sides *a a* and the rounds *b b* are made and connected in the ordinary manner, my invention consisting in the devices for connecting and holding together firmly the several lengths or separate ladders in combination. The sides of the bottom length A^1 are made wide enough apart to go outside of the sides of the length A^2 , and those of the length A^2 are made wide enough apart to go outside of those of A^3 , as shown in fig. 1. The wider ends of the lengths are strengthened with iron plates *c c*, and slots *d d* are made in them longitudinally to allow a cross-rod, *e*, that passes through the narrower ends to traverse far enough for coupling and uncoupling the extremity of the narrower end with and from the first round in the length of the wider end, by means of recesses *k k* in the extremities of the two sides, which fit over the round, as shown in the several drawings, and particularly in the enlarged sectional view, fig. 3. The cross-rod *e* has a head on one end, and a thumb-nut *g* screwed on the other end, by which the two connected ends of the ladders are drawn together to be firm and strong. The rod *e* may be taken out and put in readily in a few moments, and thus the different lengths may be used separately or combined with each other, as hereinbefore described. The lower end of the length A^1 is provided with extension-legs *h h*, by which the combined ladders, when elevated, may be steadied by opening them like a step-ladder.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The arrangement of three separate ladders or lengths, connected together with cross-rods *e* working in slots *d d* in the ends and recesses *k k* at the extremities, fitted on the first round *b*, to be employed in the several applications and positions, separately or combined, in the manner herein described.

BENJAMIN F. TURNER.

Witnesses:

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