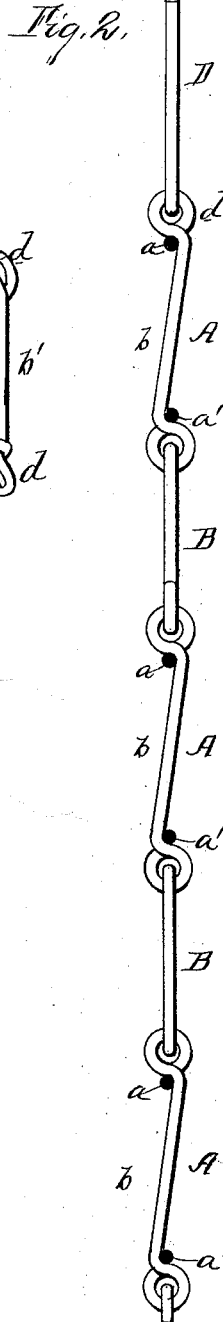
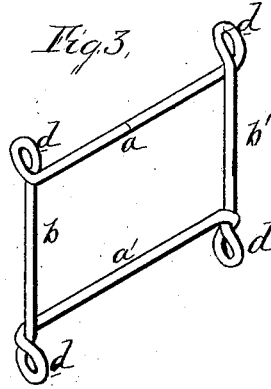
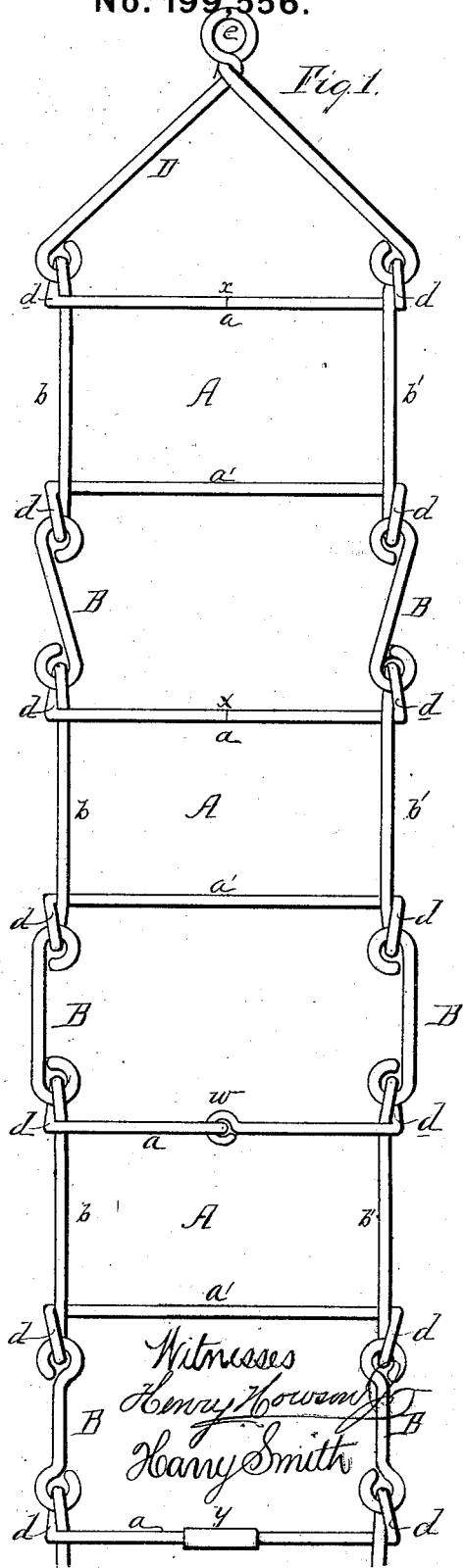


A. R. W. KNIGHT.
Ladder.

No. 199 556.

Patented Jan. 22, 1878.



Inventor
Aaron R. W. Knight
by his Attorneys
Howson and Co

UNITED STATES PATENT OFFICE.

AARON R. W. KNIGHT, OF PHILADELPHIA, (SOMERTON P. O.,) PA.

IMPROVEMENT IN LADDERS.

Specification forming part of Letters Patent No. **199,556**, dated January 22, 1878; application filed October 1, 1877.

To all whom it may concern:

Be it known that I, AARON R. W. KNIGHT, of Philadelphia, (Somerton P. O.,) Pennsylvania, have invented a new and useful Improvement in Ladders, of which the following is a specification:

The object of my invention is to construct a cheap, strong, and portable ladder of iron or other metal—an object which I attain in the following manner, reference being had to the accompanying drawing, in which—

Figure 1 is a front view of my improved ladder; Fig. 2, a vertical section of the same; and Fig. 3, a perspective view of one of the sections.

The ladder consists of sections A, connected together by links B. Each of the sections A consists of a single rod or bar of iron or steel, bent so as to form a rectangular frame, with horizontal portions *a a'*, vertical portions *b b'*, and an eye, *d*, at each corner.

The ends of the bar are united either by soldering them together, as at *x*, by the use of a sleeve or socket, as at *y*, or by eyes, as at *w*.

Each of the links B has an eye at each end, these eyes being adapted to the adjacent eyes

at the corners of the sections A, the connection being such that the ladder can be folded up into a compact mass when necessary.

The ladder is preferably provided at the top with a triangular link, D, having an eye, *e*, by means of which the ladder may be suspended to any desired object.

The sections A, made in a single piece, add greatly to the strength of the ladder, and can be rapidly and cheaply manufactured by suitable machinery.

I claim as my invention—

A ladder in which links B, having eyes at both ends, are combined with sections A, each made of a single rod or bar of metal, bent so as to form horizontal portions *a a'*, vertical portions *b b'*, and an eye, *d*, at each corner, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

AARON R. W. KNIGHT.

Witnesses:

HERMANN MOESSNER,
HARRY SMITH.