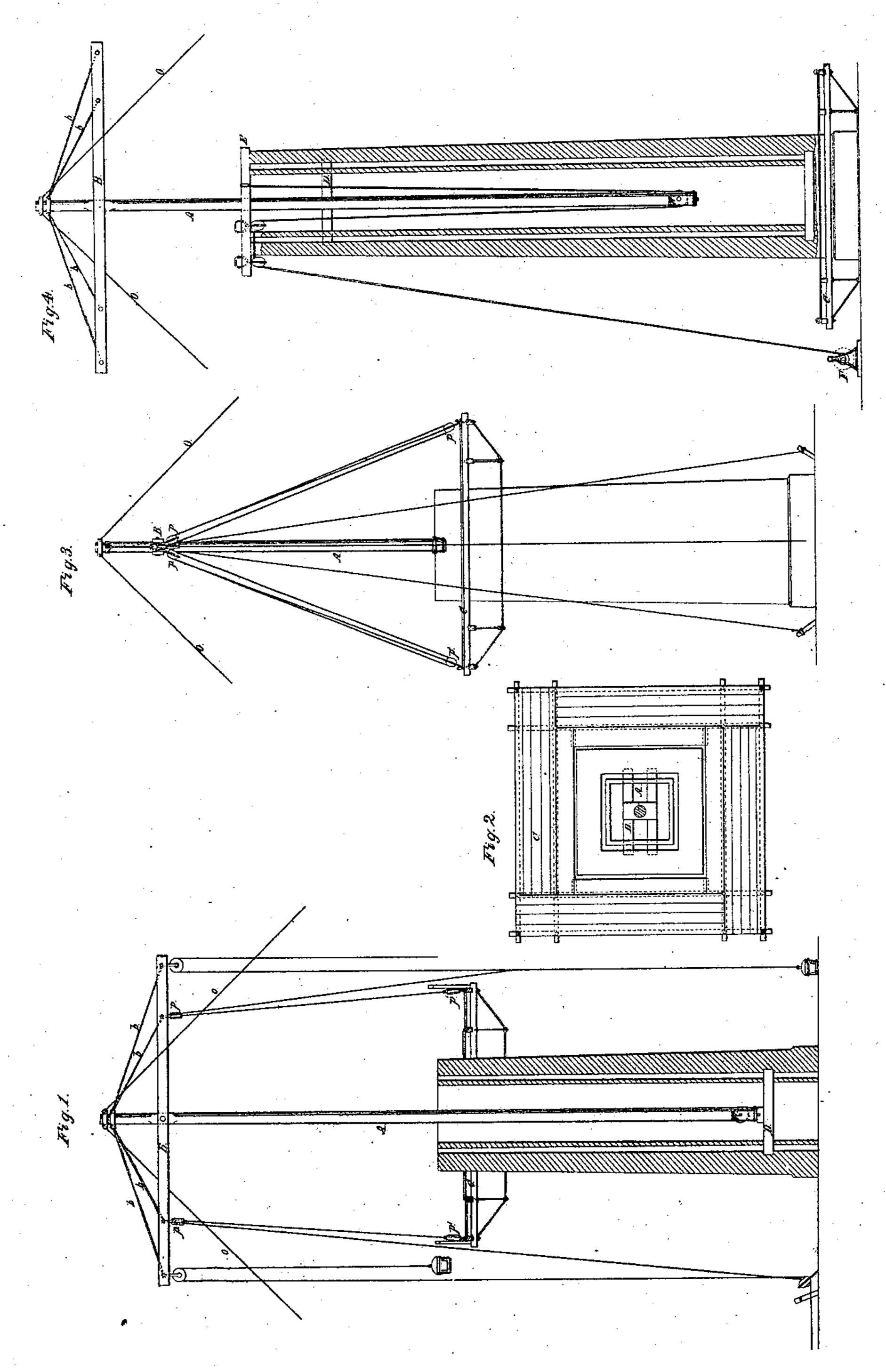
## SCIJ/1021.

Nº 12,168.

Patented Inn. 2,1855.



Witnesses Law

Inventor Thully

## UNITED STATES PATENT OFFICE.

F. RUDOLPH, OF NEW YORK, N. Y.

## ELEVATING SCAFFOLD.

Specification of Letters Patent No. 12,168, dated January 2, 1855.

To all whom it may concern:

Be it known that I, Francis Rudolph, of the city and county and State of New York, have invented a new and Improved Mode of Constructing Scaffolds to be Used in the Erection of Chimneys, Towers, and other Elevated Structures, and which I call an "Elevating Scaffold;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon and making a part of this specification.

Figure 1, is a sectional view of the chimney, showing the center pole, and the manner of its support in the chimney, with a section of the scaffold, and the manner of its support from the center pole. Fig. 2, is a plan, showing the chimney, the surrounding scaffold, and the support of the pole. Fig. 3, is a side view of the scaffold and center pole. Fig. 4, is a sectional view of the chimney, and showing the manner of elevating the pole.

The nature of my improvement consists in so constructing a scaffold, that it can readily be elevated, according as the work is carried up, to any height desired, and without increase of expense, and with little trouble.

The principal parts of my hanging scaffold are the center pole A, the cross piece B, and the scaffold C.

The center pole A, may be of any desired 35 length and size, and is intended to pass up through the center of the structure, and is stayed and supported by guys o, o, fastened to the ground, or any near object. In the the lower end is a wheel w, for a purpose 40 hereafter described, and this pole rests, in the structure, upon a strong frame work D, inserted in and extending from the opposite sides of such structure. Near the upper end of this pole, the cross piece B is firmly 45 fastened, and supported by braces  $b, b, b, b, \bar{b}$ , running from the top of the pole, and to this cross piece, at equal distances from the pole, are attached pulleys p, p, one on each side, through which pass ropes or chains, which

support or elevate the scaffold C. At the 50 extreme ends of the cross piece B, pulleys may also be attached, by which material may be elevated to the scaffold C.

The scaffold C, may be made of iron or strong timbers, firmly fastened together in 55 the manner represented in Figs. 1 and 3, or in any other convenient and secure manner, upon which is placed a strong floor, shown in Fig. 2, with side pieces, if desired, as in Fig. 1, to sustain workmen, materials, &c. 60 To the corners of the scaffold are also attached pulleys p', p', through which pass the ropes or chains, connecting with the pulleys p, p. By these, the scaffold may be elevated, from time to time as desired, until 65 it nearly reaches the cross piece B.

When it is desired to elevate the pole A, other cross pieces are to be fixed in the structure, as at D', Fig. 4, upon which the pole is to rest, when elevated; and the 70 scaffold C, may be lowered and detached, or permitted to remain as desired. At the top of the structure a strong timber E, Fig. 4, is fastened, fitted with pulleys as shown, and through which a rope works, which 75 passes under the wheel w, in the lower end of the pole A, and also under the hoisting apparatus F, to which horse, or other power may be attached. This device of a hanging scaffold may be adapted, with some al- 80 terations, to the erection of walls, and the like, but it is principally intended to be used in the erection of chimneys, towers, and other hollow structures.

What I claim as my invention and desire 85 to secure by Letters Patent is—

The arrangement and combination of the center pole A, and the scaffold C, the former usually being placed within, and the latter about the structure to be built, each of which may be elevated as desired, and the whole being constructed substantially in the manner before described.

F. RUDOLPH.

Witnesses:
SAMUEL P. BELL,
S. D. LAW.