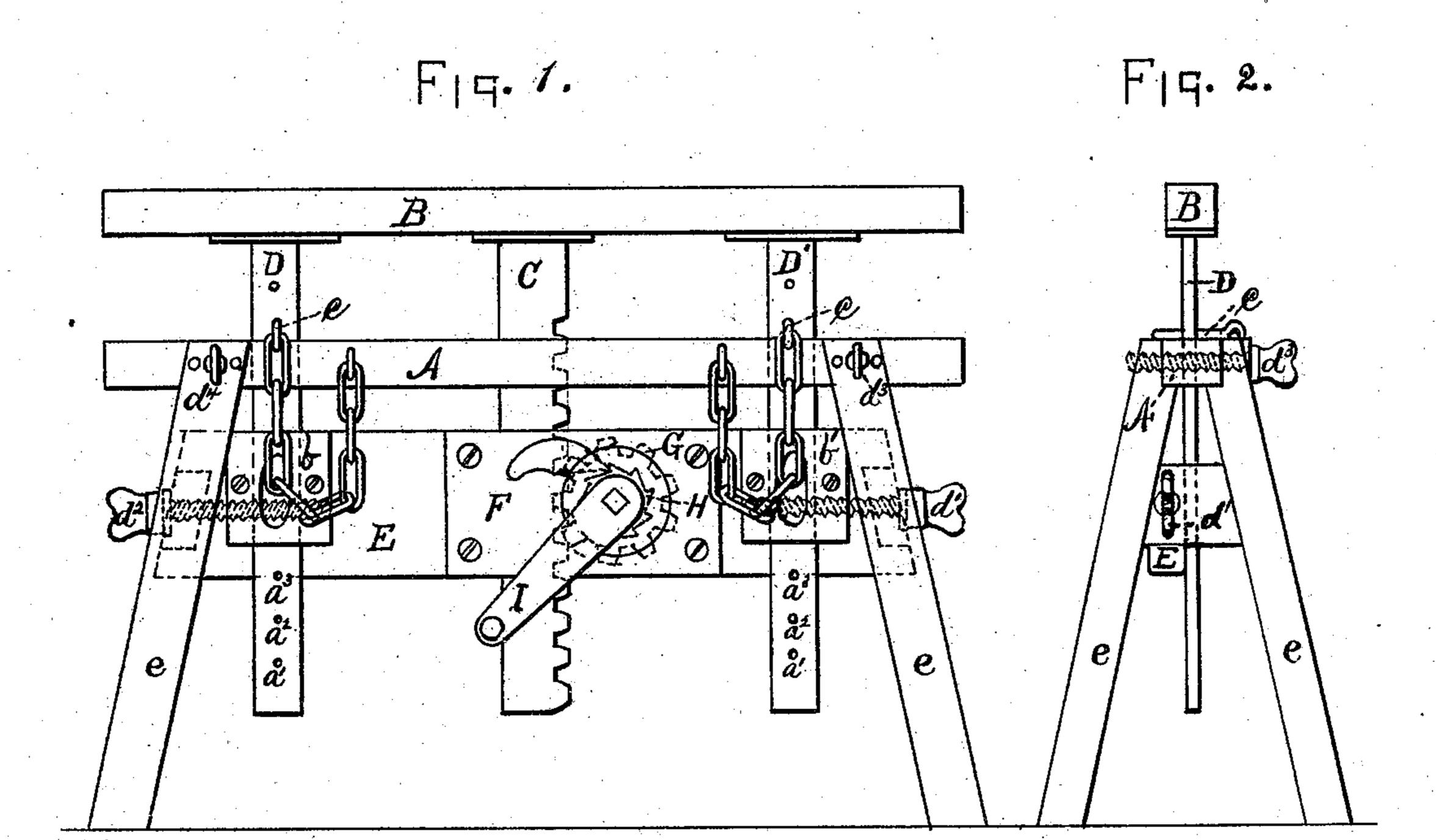
J. H. ERNST. TRESTLE.

No. 174.126.

Patented Feb. 29, 1876.



C. Bates Africasa, Allen R. Gaddis INVENTOR. Cohn Henry Emite

UNITED STATES PATENT OFFICE.

JOHN H. ERNST, OF WHEELING, WEST VIRGINIA.

IMPROVEMENT IN TRESTLES.

Specification forming part of Letters Patent No. 174,126, dated February 29, 1876; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, John Henry Ernst, of Wheeling in the county of Ohio, State of West Virginia, have invented certain Improvements in Trestles, of which the following is a specification, reference being had to the accompanying drawings, in which-

Figure 1 is a side elevation of a trestle embodying my invention. Fig. 2 is an end ele-

vation of the same.

The object and use of my invention are to produce a trestle for the use of carpenters, joiners, plasterers, or other tradesmen, so constructed as to be readily adjusted to any desired height, or taken apart for transportation, thereby effecting the use of the ordinary trestle in a more economical and convenient manner; and consists of a trestle similar in form and construction to the one in common use provided with a horizontal top plate or bar attached to vertical uprights that work through slots in the stationary cross arms of the trestle, the top plate or floor-bar being raised or lowered by a rack and toothed wheel provided with ratchet-wheel and crank.

In Fig. 1, A is a horizontal arm or bar of a trestle of common form, to which are attached four or more legs, e e. B is an adjustable top plate, which, for convenience, we will term floor bar. C is a rack permanently secured to the center of floor bar B. D D' are vertical bars or uprights attached to floor-bar B, and are provided with pin-apertures at a2, &c. E is a horizontal bar to which the keepers sustaining the upright pieces are attached. $b b^1$ are keepers provided with grooves or slots for the passage of the upright pieces D D', and are secured to the bar E. F is a keeper pro vided with slot for passage of rack C. G is a toothed wheel meshing with the rack C, and working on an axle bearing on the keeper F and cross-bar E. H is a ratchet-wheel on axle of wheel G. I is a crank on said axle. cc' are pins attached to cross-bar A by chains or like fastenings. $d d^1 d^2 d^3$ are thumb or set screws.

In using the trestle for scaffolding or other purposes two or more of them are placed at the requisite distance apart, and the scaffoldboards or other things are placed upon them. The floor being laid upon the adjustable bar B, it is elevated or depressed at will by turning the crank I, which causes the wheel G to operate the rack C, thereby moving the top or floor-bar B up or down. The operation of the trestle is similar for the various other purposes to which it may be applied. A lateral support is given to the floor-bar B by means of the upright pieces D D', the pressure being taken off the operating mechanism by inserting the pins c c' in the apertures $a^1 a^2$, &c., in the upright pieces D D', so that they will rest upon the top of the cross-bar A of the trestle.

The several pieces forming the trestle are so put together with bolts, set-screws, or similar fastenings, that they may readily be taken apart for the purposes of transportation. The adjustable bar B can at any time, if desired, be separated from the trestle. It is obvious. that the bar E can be mortised similar to top plate A, but I consider the keepers on the side the better plan.

Having described my invention, what I claim, and desire to secure by Letters Patent, 18-

The toothed wheel G, the rack C, and the platform floor-bar B, in combination with each other, substantially as described, and for the purpose set forth.

JOHN HENRY ERNST.

Witnesses:

C. BATES HOWARD, A. R. GADDIS.