

M. H. CUMMINGS.
 - KNOCKDOWN TENT.
 APPLICATION FILED NOV. 19, 1909.

970,612.

Patented Sept. 20, 1910.

2 SHEETS—SHEET 1.

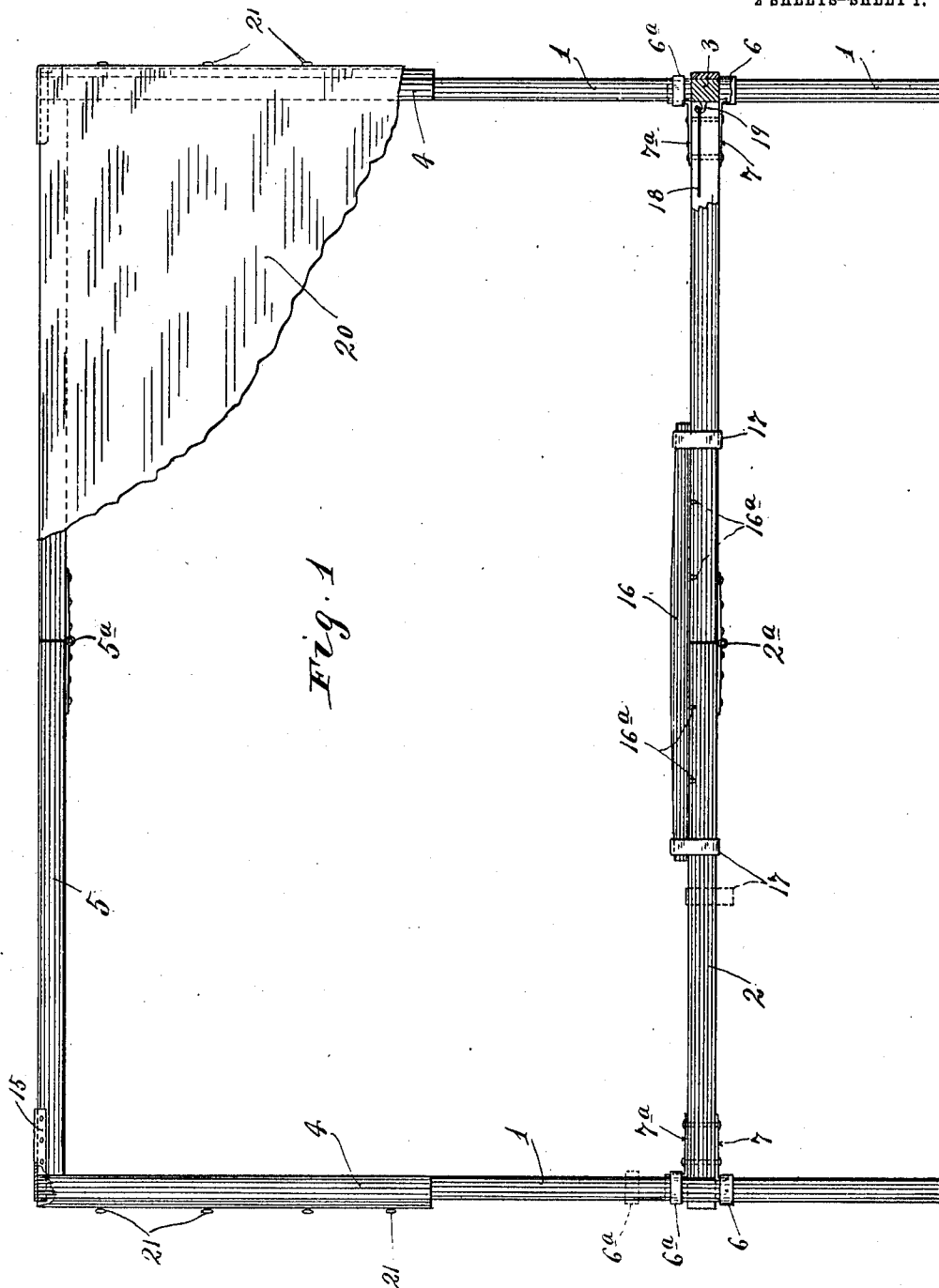


Fig. 1

Witnesses.
 A. H. Osahl.
 H. D. Kilgore

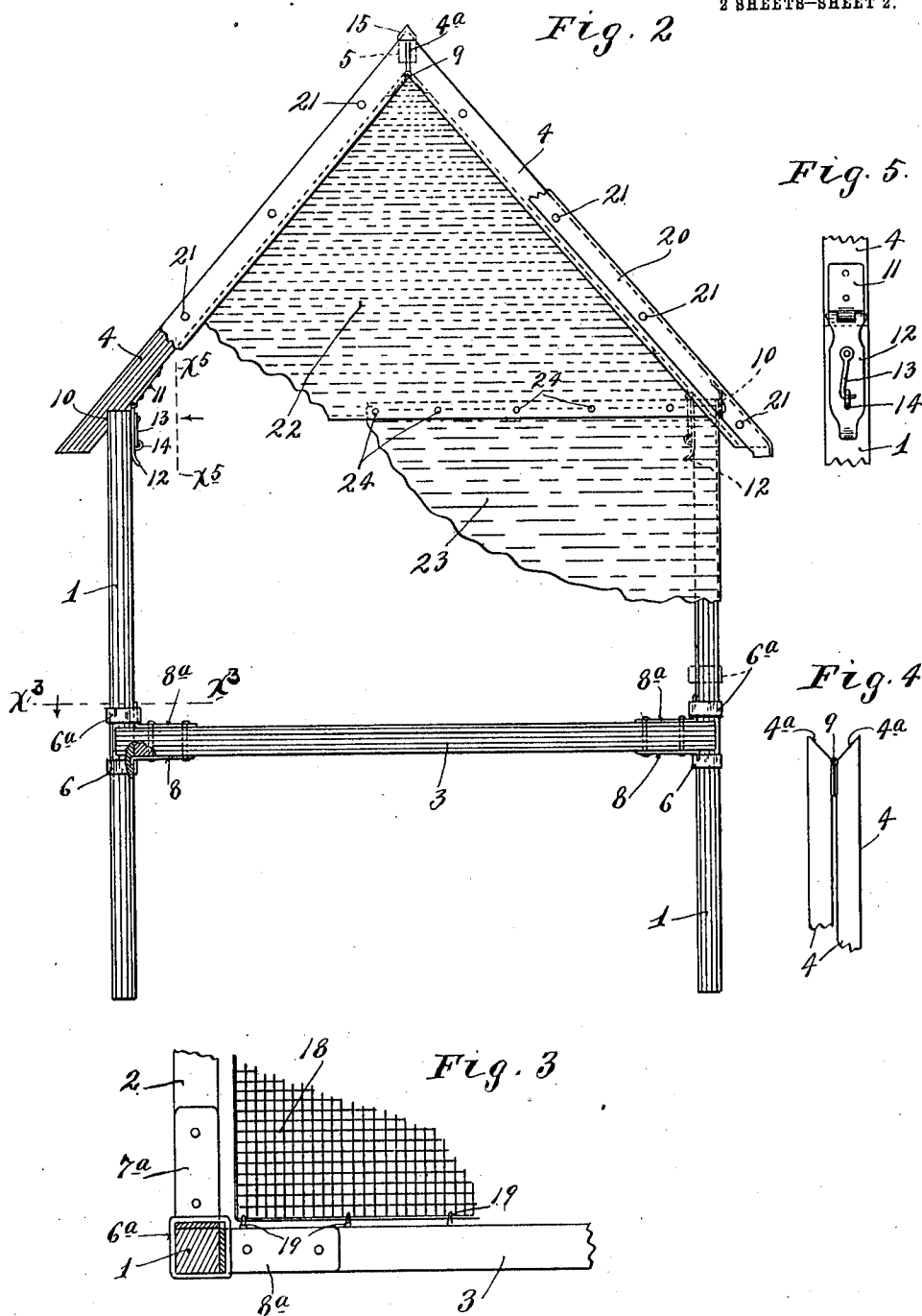
Inventor.
 Michael H. Cummings
 By his attorneys
 William W. Merchant

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UNITED STATES PATENT OFFICE.

MICHAEL H. CUMMINGS, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-THIRD TO THOMAS H. MORIARTY AND ONE-THIRD TO MICHAEL DUFFY, OF MINNEAPOLIS, MINNESOTA.

KNOCKDOWN TENT.

970,612.

Specification of Letters Patent. Patented Sept. 20, 1910.

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To all whom it may concern:

Be it known that I, MICHAEL H. CUMMINGS, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Knockdown Tents; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its especial object to provide a simple, convenient and efficient tent, which may be quickly and easily knocked down or taken apart and again set up, and which, when knocked down, may be packed in very small space so that it may be easily carried.

To the above ends, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims. A tent of this character will be found useful in a great many different places and for many different purposes. It has been especially designed to meet the requirements of hunters, campers and men working on railway construction and other places where the place of abode continually changes. It will also be found highly serviceable for use in connection with hospitals or other places where persons, because of ill health, find it necessary to sleep out of doors.

The invention is illustrated by the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a view in side elevation, showing the framework of the device and a portion of the tent canvas; Fig. 2 is an end elevation of the said device, some parts being broken away; Fig. 3 is a detail in horizontal section on the line $x^3 x^3$ of Fig. 2; Fig. 4 is a detail, showing one pair of hinge connected rafters, folded together, and some parts being broken away; and Fig. 5 is a detail view, looking at the parts shown in the vicinity of the line marked $x^5 x^5$ in Fig. 2.

The framework of the device is made up of corner posts 1, side bars 2, end bars 3, roof rafters 4 and a ridge pole 5. The corner posts 1 are provided, at their intermediate portions, with rigidly secured rectangular coupling links 6, that are spaced from

the inturned sides of the said posts so that they are adapted to receive the downturned ends of metal coupling straps 7 and 8 secured respectively to the ends of the side bars 2 and the end bars 3. The said bars 2 and 3 are also provided, at their ends, with upper metal straps 7^a and 8^a, the upturned ends of which are adapted to be engaged by rectangular links 6^a which are like the links 6 except that they are mounted to slide vertically on the cooperating corner posts 1. As is evident, by these coupling links 6 and 6^a and the cooperating coupling straps 7, 8, 7^a and 8^a, the sides of the end bars may be very quickly and rigidly secured to the corner posts and, on the other hand, may be very quickly detached therefrom.

The rafters 4, which are arranged in front and rear pairs, are reversely inclined and, at their upper ends, are connected by hinges 9 and are provided with beveled upper ends 4^a, that limit the spreading movements of the said rafters. Near their lower ends, the rafters are provided with notches 10, that engage the upper ends of the posts 1, as best shown in Fig. 2. Rigidly secured to the lower edge of each rafter 4, just above its notch 10, is a small hinge plate 11, to which a depending hasp plate is hinged at its upper end. These hasp plates 12 are provided with pivotal hooks 13, that are adapted to engage staples or eyes 14 secured to the upper ends of the said posts 1 and projecting through perforations in the said hasp plates. These hasp connections securely but detachably anchor the lower ends of the rafters to the upper ends of the corner posts.

Rigidly secured to the ends of the ridge pole 5 and projecting beyond the same, are channel-shaped metal coupling 15, having at their projecting ends downwardly opening pockets adapted to fit the beveled extreme upper ends of the rafters 4, and thus hold the said ridge pole in a working position.

The ridge pole 5 and the two side bars 2, because of their considerable length and the desirability of packing the entire device in small space when knocked down, are cut in two at their central portions and connected by hinges 5^a and 2^a respectively. The hinges are located at the under sides of the said bars to prevent the downward buckling movement thereof. Also the side bars 2 are

reinforced by joint bars 16, having tapered ends adapted to be rigidly but detachably secured to the said side bars overlapping the joints thereof, by metal coupling links 5 or bands 17 mounted to slide on the said side bars. Preferably the reinforcing bars 16 are provided with dowel pins 16^a that engage seats in the upper faces of the side bars 2. The bed or cot spring 18, which is 10 preferably of woven wire structure, with selvage edge, is adapted to be detachably supported at its ends by hooks 19 secured to the end bars 3. This spring may be thus attached while the side bars are buckled 15 and, when the said side bars are straightened with the said spring, will be drawn taut and put under the proper tension for supporting a person lying thereon.

The roof canvas 20 is adapted to be 20 stretched over the ridge pole 5 and over the rafters 4, and secured to the latter by any suitable devices such, for instance, as buttons or headed projections 21 on the said rafters, which engage buttonholes at the 25 edges of the said roof canvas. Gable sheets 22 are permanently secured to the rafters 4 and these will be collapsed or buckled when the said rafters are folded together. These so-called gable sheets 22, which are also 30 preferably of canvas, are provided with detachable depending extension sheets 23, which may be secured thereto by buttons 24. The roof canvas 20 may also be provided with depending portions of any desired 35 length and these may be either permanently or detachably applied thereto.

When the device is to be folded, for the purpose of storage or shipment, the end and side bars, the corner posts, the ridge pole

and the rafters may all be detached and 40 the said side bars and ridge pole may be folded upon themselves, while the rafters, with their attached gable sheets, may be folded together. The entire device may thus be packed in very small space and shipped 45 at small expense or carried from place to place.

What I claim is:

1. A device of the kind described comprising corner posts, end bars, side bars, rafters 50 having gable sheets permanently secured thereto, a ridge pole and a flexible covering, said parts being detachably connected, the said rafters at their upper ends being connected in pairs by hinges permitting them 55 to fold together and beveled to afford stops to limit spreading movement, and said ridge pole being provided at its ends with couplings adapted to fit over the beveled upper ends of said rafters, substantially as de- 60 scribed.

2. A device of the kind described comprising corner posts, end bars, side bars, rafters, a ridge pole and covering sheets, detachably 65 connected, the said side bars and ridge pole each being made up of hinged sections, the said side bars being reinforced by joint bars overlapping the joints thereof, and sliding links and dowel pins detachably connecting said joint bars to said side bars, substan- 70 tially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL H. CUMMINGS.

Witnesses:

F. D. MERCHANT,
HARRY D. KILGORE.