

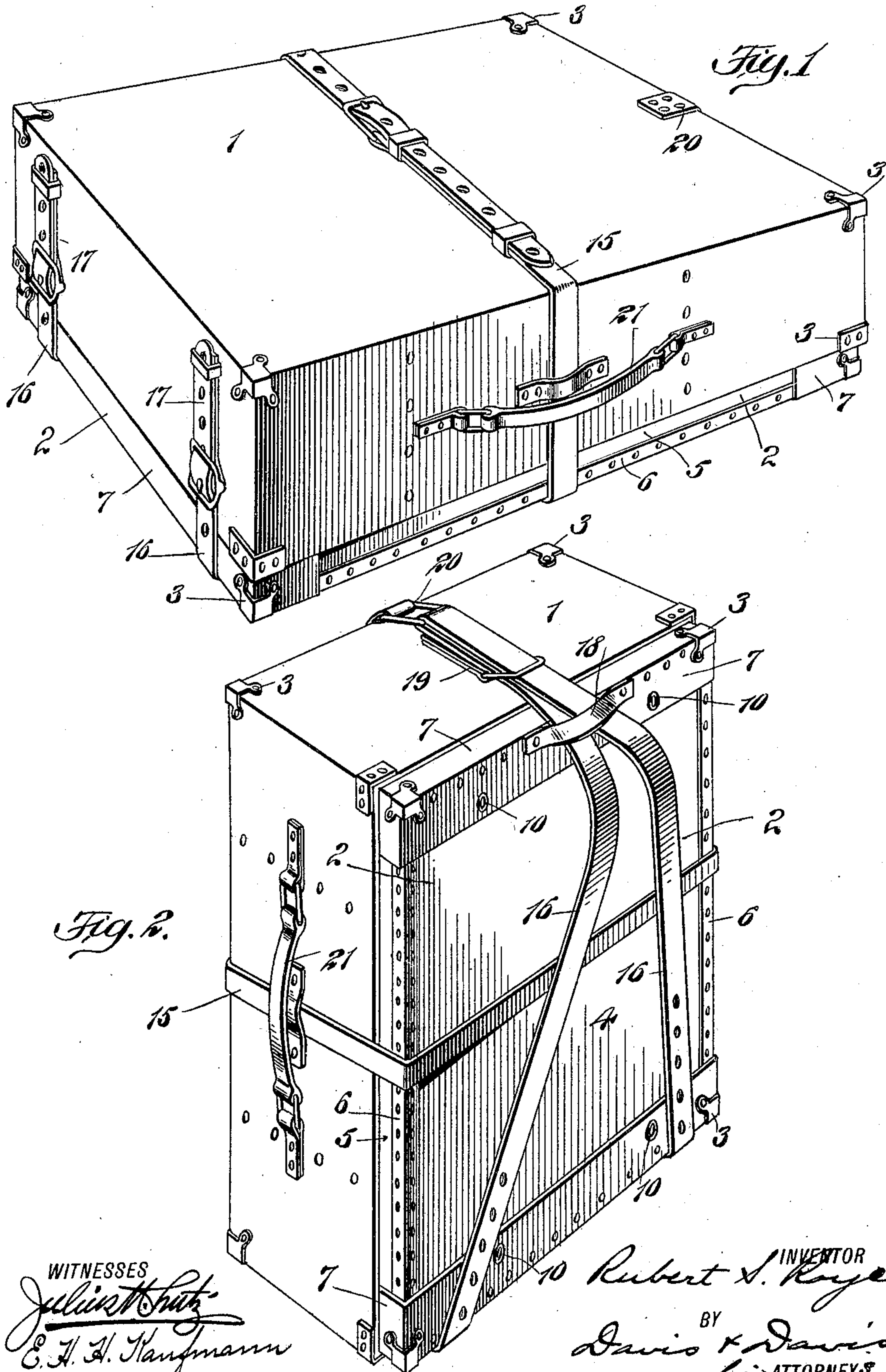
R. S. ROYCE.
KNAPSACK.

APPLICATION FILED FEB. 10, 1908.

922,046.

Patented May 18, 1909.

2 SHEETS—SHEET 1.



WITNESSES
Julius Hutz
E. J. H. Kaufmann

INVENTOR
Robert S. Royce
BY
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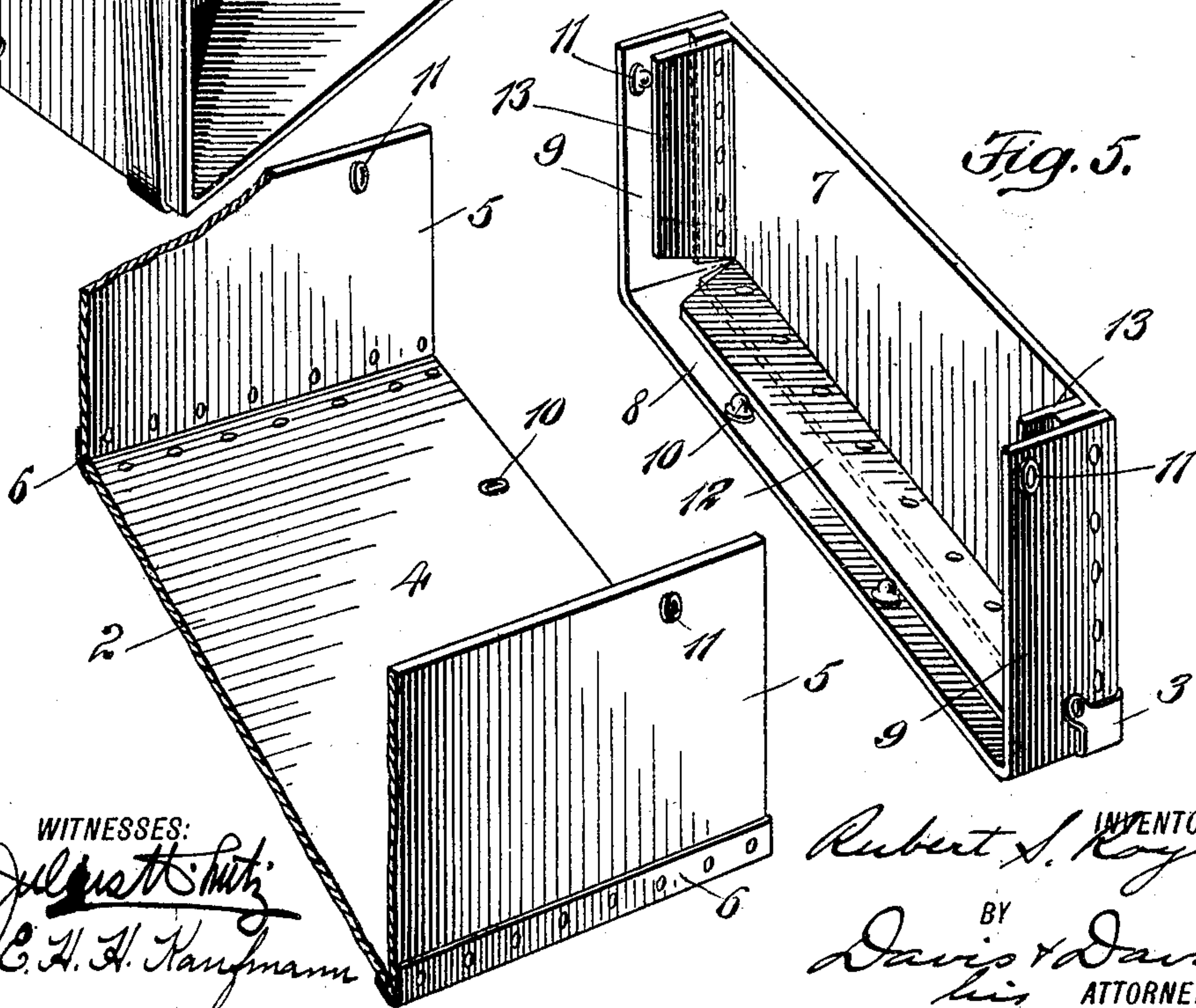
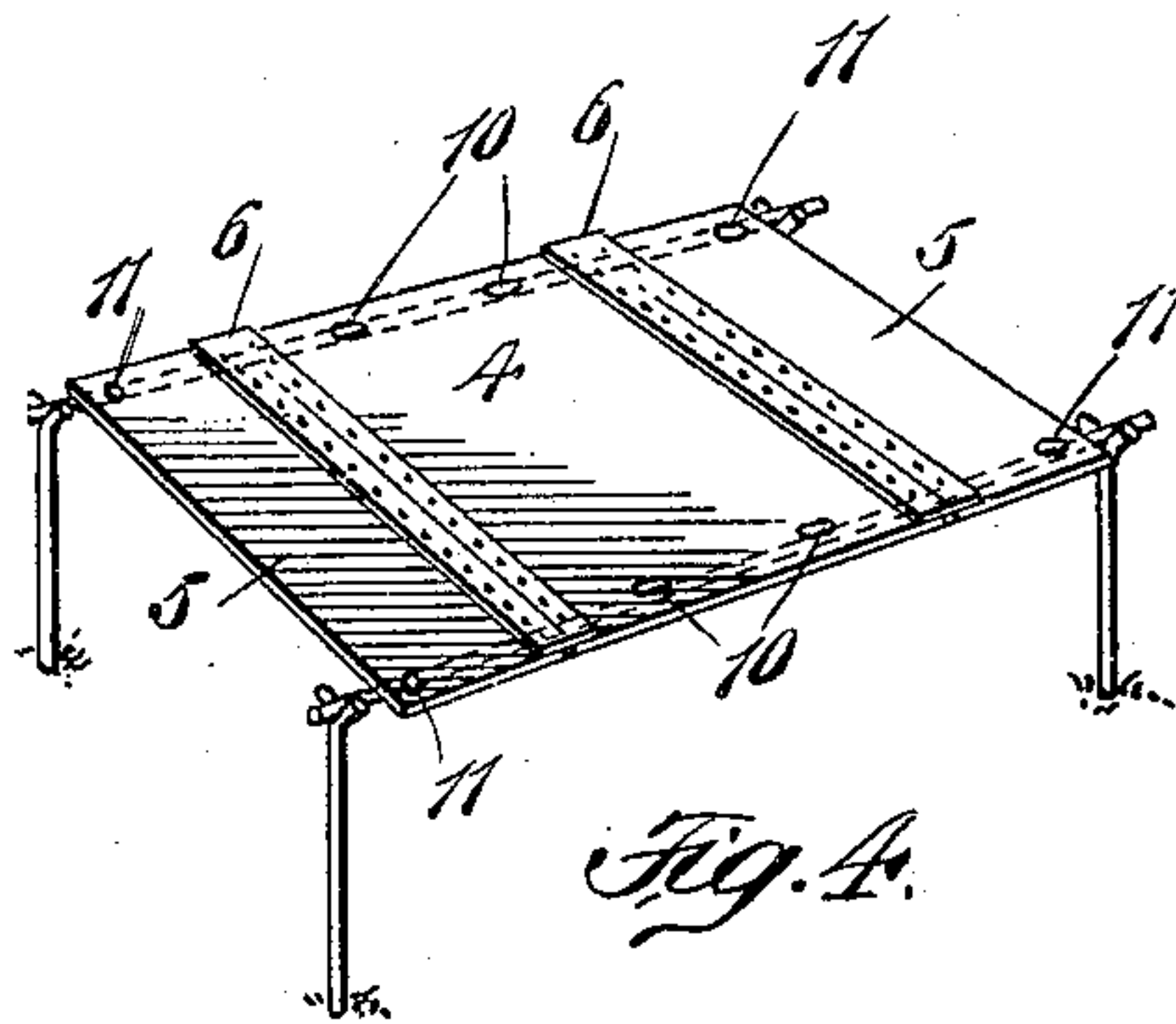
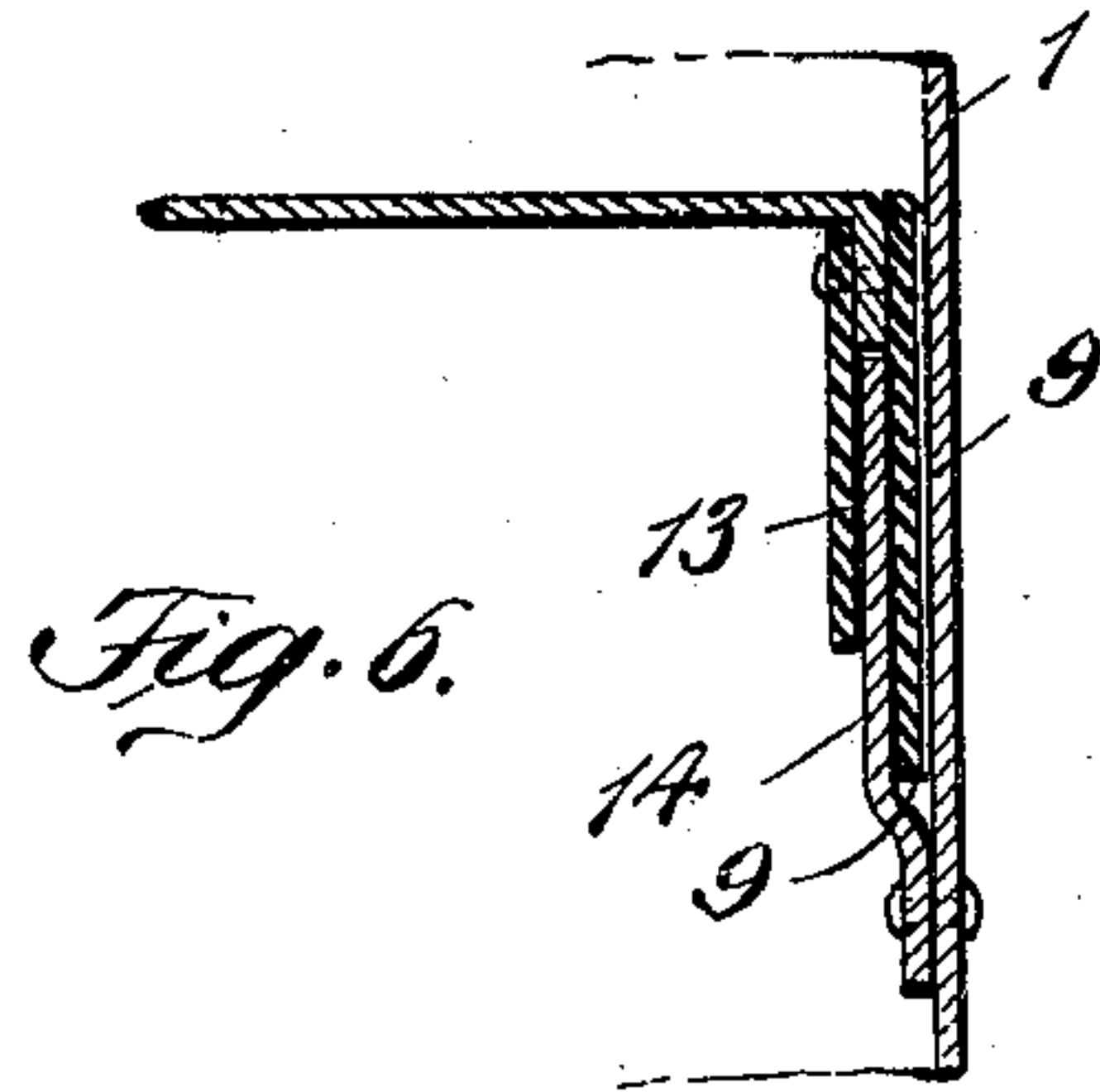
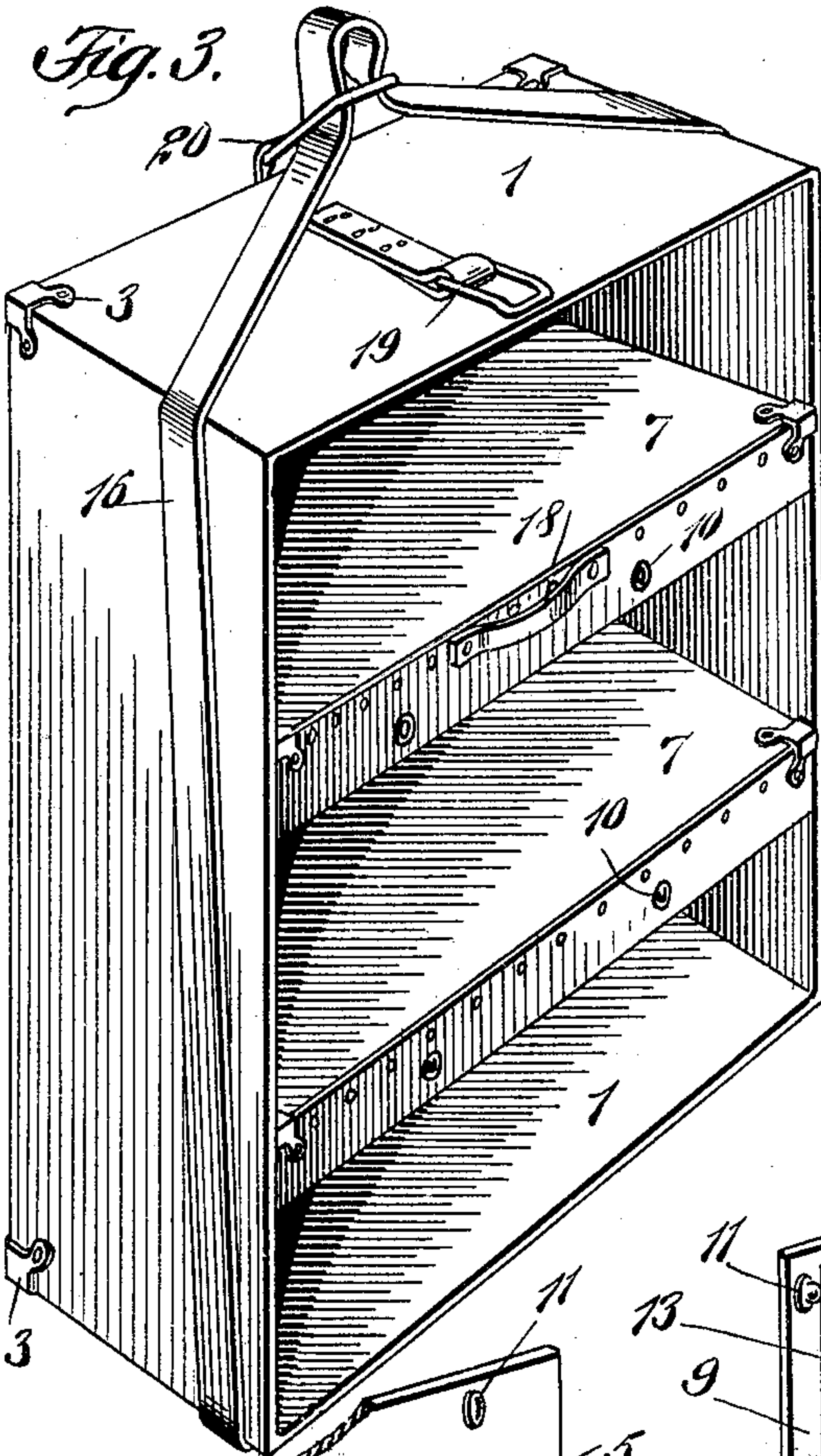
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2 SHEETS—SHEET 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

RUBERT STEWART ROYCE, OF NEW YORK, N. Y.

KNAPSACK.

No. 922,046.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed February 10, 1908. Serial No. 415,117.

To all whom it may concern:

Be it known that I, RUBERT STEWART ROYCE, a citizen of the United States, residing in the borough of Brooklyn, county of Kings, city and State of New York, have invented certain new and useful Improvements in Knapsacks, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

10 Figure 1 is a perspective view of the device showing the two members tightly strapped together; Fig. 2 a similar view of the device arranged to be carried on the back; Fig. 3 a similar view showing the outer shell or member of the knapsack converted into a set of shelves; Fig. 4 a perspective view showing the bottom and sides of the inner member of the knapsack unfolded to form a table top; Fig. 5 a detail perspective view of one end of the inner member of the knapsack, the end piece being detached from the bottom and sides; and Fig. 6 a detail vertical sectional view showing the means for supporting the ends of the inner member of the knapsack within the outer member to form shelves.

One of the main objects of this invention is to provide a knapsack formed of two telescoping members which may be securely strapped together.

30 Another object of the invention is to so construct the parts or members of the knapsack that one of them may be "knocked down," or divided into several sections, each section of which may be used for some useful purpose about a camp.

40 The purpose of this invention is to provide a convertible, light, strong and preferably water-proof knapsack to hold a camper's outfit during transportation, and to so construct it that each part will serve a useful purpose in the camp.

Referring to the various parts by numerals, 1 designates the outer part or cover of the knapsack and 2 the inner part or tray. 45 The tray telescopes within the cover in the ordinary manner of the well known telescoping traveling case. I prefer to form these parts of light, stiff, water-proof material such as the so-called fiber board, but, of course, it will be understood that they may be made of any suitable material. The cover or outer member is provided with suitable braces 3 at its corners, and, of course, it may be braced and reinforced in any suitable manner.

55 The inner member or tray of the knapsack is formed with the bottom 4 and with the

sides 5 which are flexibly connected to the bottom by any suitable form of hinge. I have shown the sides connected to the longitudinal edges of the bottom by means of flexible leather hinge straps 6 so that the sides and the bottom may be brought into the same horizontal plane by folding down the sides. The ends 7 of the tray are adapted to be detachably connected to the bottom and sides and for this purpose they are each provided with a horizontal flange 8 which is adapted to fit under the bottom 4 of the tray and with the vertical flanges 9 which are adapted to fit against the outer surfaces of the side pieces 5, when said sides are in their vertical positions and substantially perpendicular to the bottom part.

To hold the bottom flange 8 of the end piece in engagement with the bottom of the tray, snap fasteners 10 are provided, one member of said fastener being carried by the flange and the other member thereof being secured to the bottom of the tray in such position that when the end is in position said two parts of the snap fastener register and may be easily connected together. To secure the vertical flanges 9 to the sides 5 of the tray I provide two-part snap fasteners 11, one part of which is carried by the flanges 9, the other part being connected to the sides in such a position that the two parts will register when the ends are in position on the body of the tray. Each of the end sections is also provided with an inner horizontal flange 12 which is adapted to fit over the bottom of the tray when the end section is in position, to make a tight joint therewith, and to prevent accidental separation of the fasteners 10. Each of the end sections is also provided with inner vertical flanges 13 which engage the inner surfaces of the sides 5 so that the sides fit in between the flanges 9 and 13. This makes a strong construction, not only bracing the corners of the tray, but preventing the accidental separation of the fasteners which connect the end sections to the body of the tray. It will, of course, be understood that any suitable form of fasteners may be used, the two-part snap fasteners shown being very convenient and efficient.

The longitudinal sides of the cover are provided on their inner surfaces with transverse straps or cleats 14 of flat material, preferably comparatively wide strips of the same material of which the cover is made.

These cleats are secured to the side walls of the cover along one of their edges, their free edges being off-set slightly from the cover, as shown clearly in Fig. 6. When the end pieces or sections of the tray are detached from the bottom and sides thereof the flanges 9 thereon may be engaged over the cleats 14, as shown clearly in Figs. 3 and 6 to form compartments within the cover. By standing the cover on its end, or by suitably suspending it, so that the ends 7 are substantially horizontal, a set of shelves is provided which is very desirable and very convenient in camp. As the entire device is made of water-proof material, it will be seen that a set of shelves made up in this way will form a very desirable place for storing food supplies, ammunition, apparel, etc.

When the end sections are detached from the bottom and sides of the tray the sides may be folded down into the plane of the bottom to form a convenient table top, which may be supported on sticks, as shown clearly in Fig. 4.

To secure the two parts of the knapsack together I provide a strap 15 which passes transversely around the case, as shown clearly in Figs. 1 and 2. Shoulder straps are formed from a strap 16. The two ends of this strap are buckled to the lower end of the cover near the side edges thereof, as shown at 17 in Fig. 1. Before being secured both ends of this strap are passed through a keeper or loop 18 secured to one of the end sections, said end section being arranged, when the tray is placed within the cover, at the opposite end of the cover from the buckles 17 so that the ends of the strap 16 separate or diverge from said loop to the buckles 17. The looped end of the strap is passed through bails 19 and 20 secured to the end of the cover opposite the buckles 17, said bails being secured to the center of said end. I provide two bails 19 and 20 to permit of the extension of the two parts 1 and 2 of the casing without the necessity of providing an unduly long strap 16. When the case is extended the strap will be looped through the bail 19, but when it is in its normal position, the tray 2 being entirely inclosed by the cover, the strap will be looped between both bails 19 and 20 in order to take up a portion of the slack thereof. The strap 16 may be arranged as shown in Fig. 3 to form a supporting means for the shelves. In this arrangement of the strap it is looped through the bail 20 as shown.

It will be noted that the shoulder straps are connected to the outer casing or cover of the knapsack and extend around the bottom of the inner member so that when the knapsack is carried on the back the bottom of the inner member will be against the back of the person carrying the knapsack. As the shoulder straps are connected to the outer

member or cover it will be seen that the two members of the knapsack will be securely held together and that there will be no tendency of the inner member to fall away from the outer member. This is important. It will also be noted that when the shoulder straps are buckled over the knapsack they will extend across the bottom of the inner member and assist in securely holding it in position within the cover. This is a very important feature of my invention and serves as a very effective means of securing the two parts of the knapsack together, particularly when they have been packed with material and are stacked up either for transportation or storage. In forming a knapsack of two telescoping parts or members it is necessary to provide means for effectively securing the two members together so that the device may be subjected to rough usage without any danger of the two parts or members becoming separated. By my arrangement of the shoulder straps I secure this without the necessity of employing any extra straps, except the small strap 15 which is desirable for holding the two parts together when the knapsack is being placed on the back or removed therefrom. It will, of course, be understood that the strap 15 will be unnecessary for holding the two parts together when the knapsack is in position on the back of the person carrying it.

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

1. A knapsack consisting of a cover and an inner removable tray formed in sections detachably connected together, and means whereby sections of the tray when detached may be secured to the cover to form compartments therein.

2. A knapsack consisting of two parts adapted to telescope one within the other, one of said parts being made up of sections detachably connected together, the other part being provided with means whereby the said detached sections may be inserted therein to form compartments.

3. A knapsack consisting of two telescoping sections constituting an outer cover and an inner tray, the tray being formed with detachable ends, means secured within the cover part to support the detached tray ends to form compartments within the cover part, whereby said cover part with the said ends may be used as a casing containing shelves.

4. A knapsack consisting of two rectangular box-like telescoping parts, one constituting a cover and the other a tray adapted to be received within the cover, said tray being formed with detachable ends, a bottom, and sides flexibly connected to the longitudinal edges of the bottom to permit them to be folded into the plane of the bottom, means within the cover to support the ends of the

tray when they are detached to form compartments in the cover, whereby the cover and the tray ends may be used to form a set of shelves and the bottom and sides of the tray may be used as a table top.

5 5. A knapsack consisting of two telescoping parts, one constituting an outer cover and the other a tray to be received within the cover, said tray being formed with detachable end sections, each detachable end section being provided with a bottom flange to engage the outer surface of the bottom of the tray and with vertical flanges to engage the outer surfaces of the sides of the tray, and fastening means adapted to connect said flanges to the adjoining portions of the tray, each of said detachable ends being provided with inner flanges adapted to overlap the adjoining portions of the bottom and the sides of the tray.

6. A knapsack consisting of two telescoping parts, a pair of bails secured to one end of the outer part near the middle thereof and in line with each other, a pair of buckles secured to the other end of the outer part near the side edges thereof, a loop secured to the bottom of the inner part adjacent to the bails on the outer part and a strap passed through the bails and through the loop on the bottom of the inner part, the ends of said strap being connected to the buckles on the outer part, whereby said strap will extend across the bottom of the inner part and form the shoulder straps, said strap also serving to hold the outer part over the inner part when the device is in position on the back of the carrier.

7. A knapsack consisting of two telescoping parts, one constituting a cover and the other a tray to be received within the cover, detachable end sections for said tray, each end section being provided with a bottom flange to engage the outer surface of the bottom of the tray and with vertical flanges to engage the outer surfaces of the sides of the tray, fastening devices carried by said flanges and adapted to connect them to the adjoining portions of the sides and bottom of the tray, each end section being also formed with inner flanges to engage the inner surfaces of the sides and bottom of the tray.

8. A knapsack consisting of two telescoping parts and shoulder straps connected to the outer part, said straps being formed by securing the two ends of a single strap to one end of the outer part near the side edges thereof and connecting said strap midway its ends to the other end of the outer part at the center thereof, whereby the two parts of the strap will converge toward one end of the outer part and the two portions of the strap will extend across the bottom of the inner part, whereby when the knapsack is carried the bottom of the inner part will bear against the back of the carrier and the shoulder straps will hold the outer part over the inner part.

In testimony whereof I hereunto affix my signature in the presence of two witnesses this eighth day of February 1908.

RUBERT STEWART ROYCE.

Witnesses:

WM. R. DAVIS,

EMMA H. H. KAUFMANN.