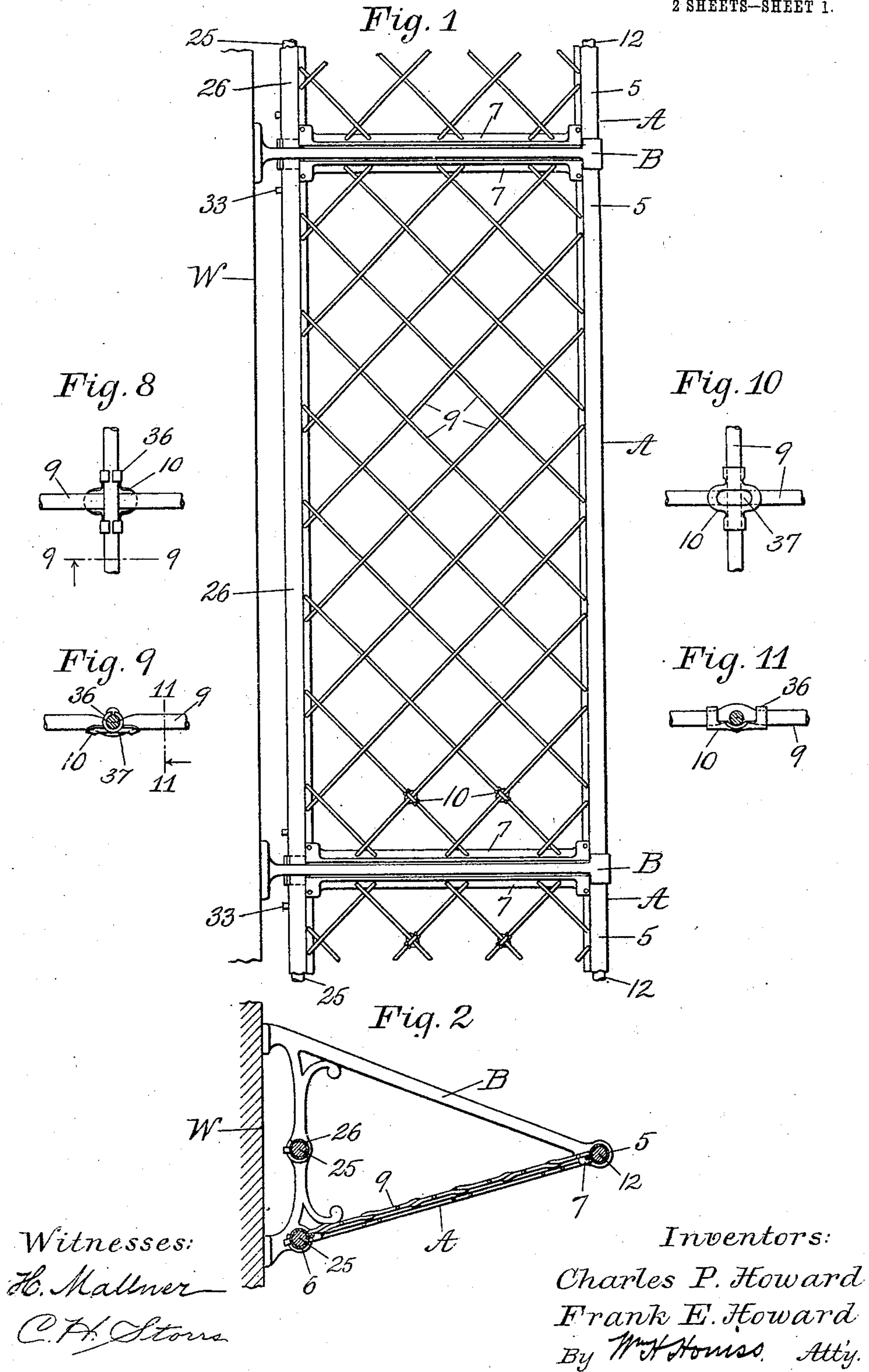


C. P. & F. E. HOWARD.
BAGGAGE RACK.
APPLICATION FILED JAN. 6, 1908.

907,601.

Patented Dec. 22, 1908.

2 SHEETS—SHEET 1.



Witnesses:
H. Mallner
C. H. Stone

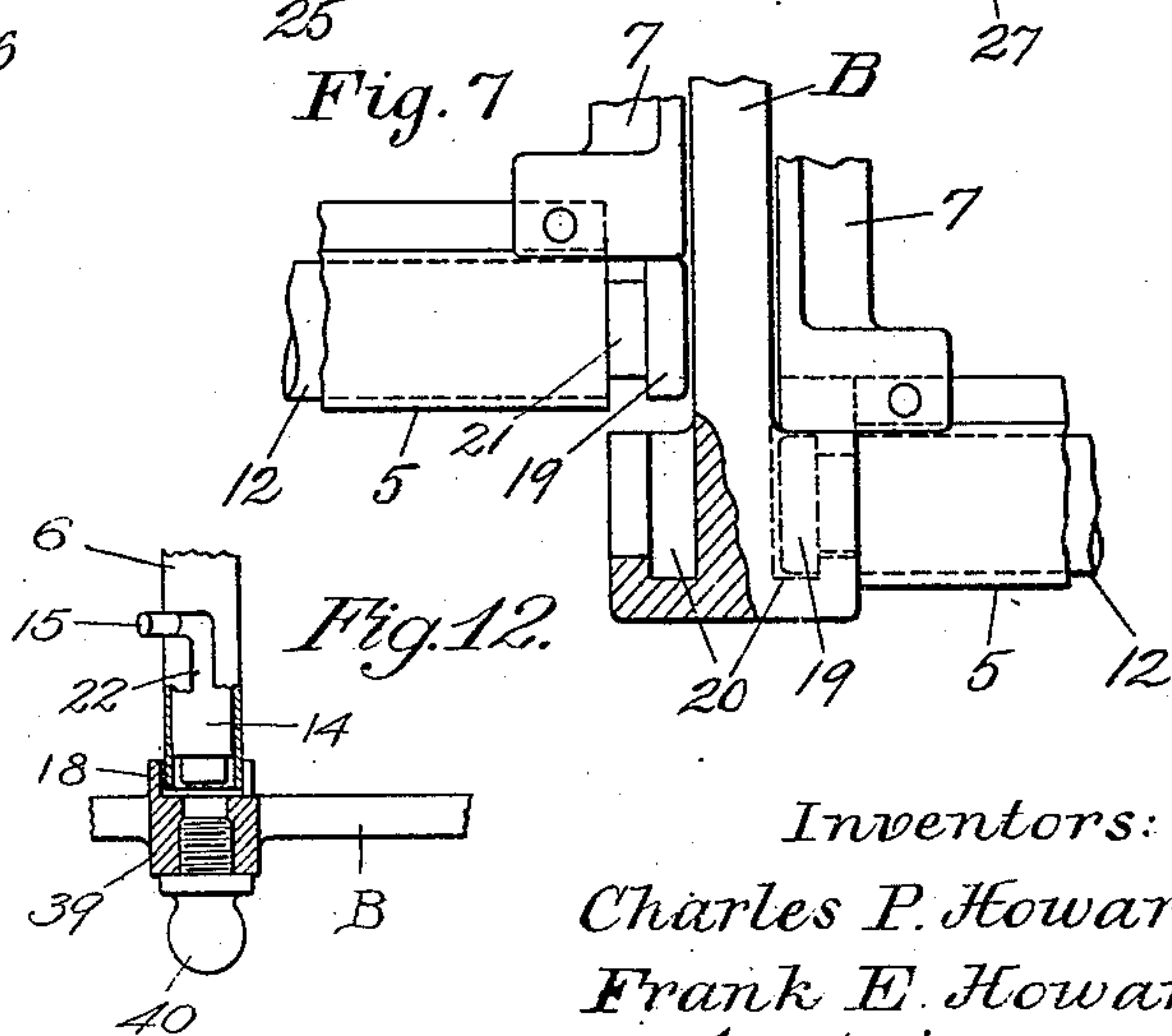
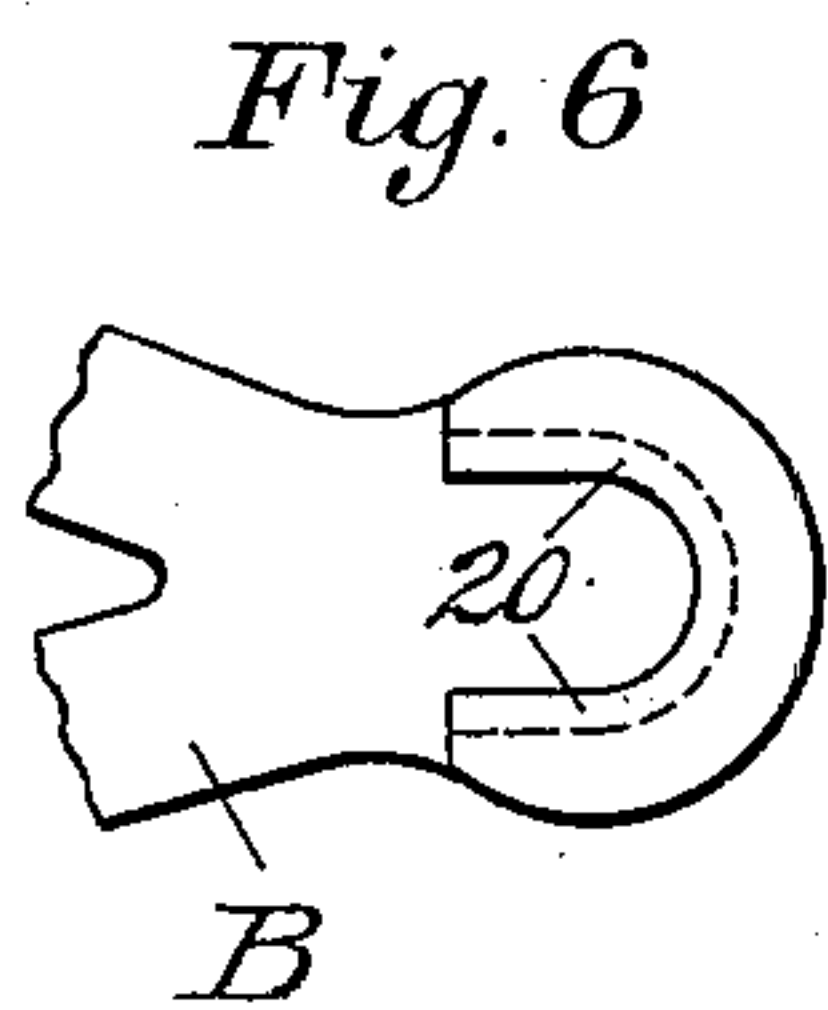
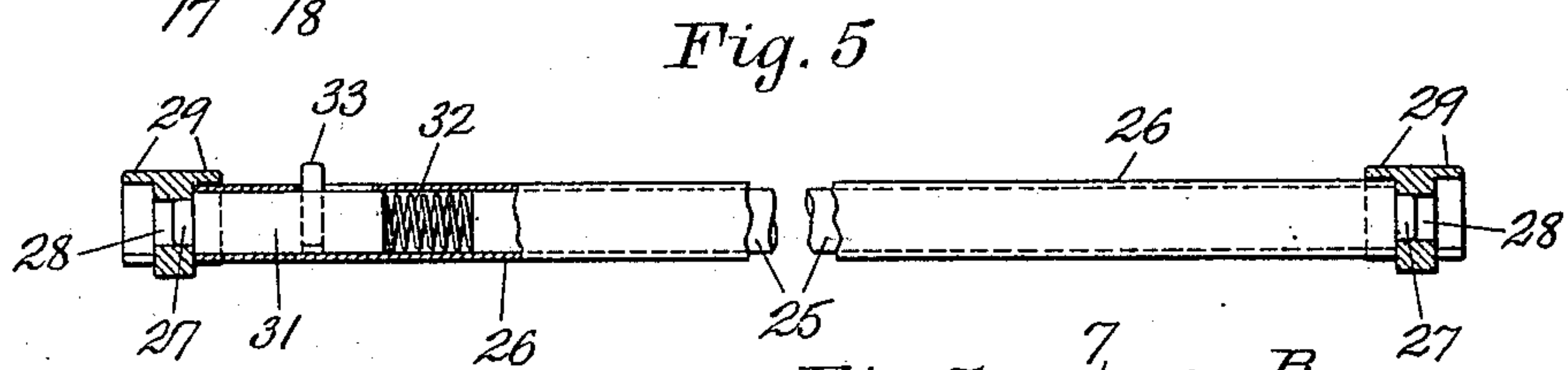
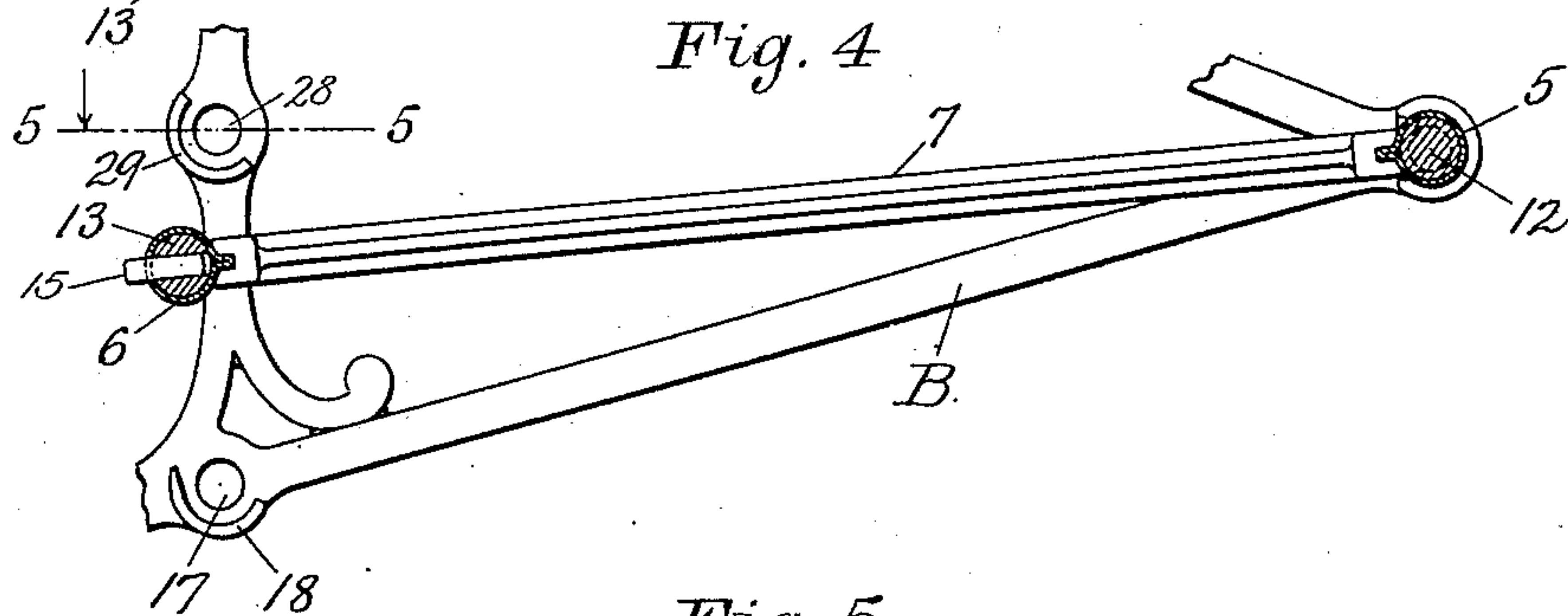
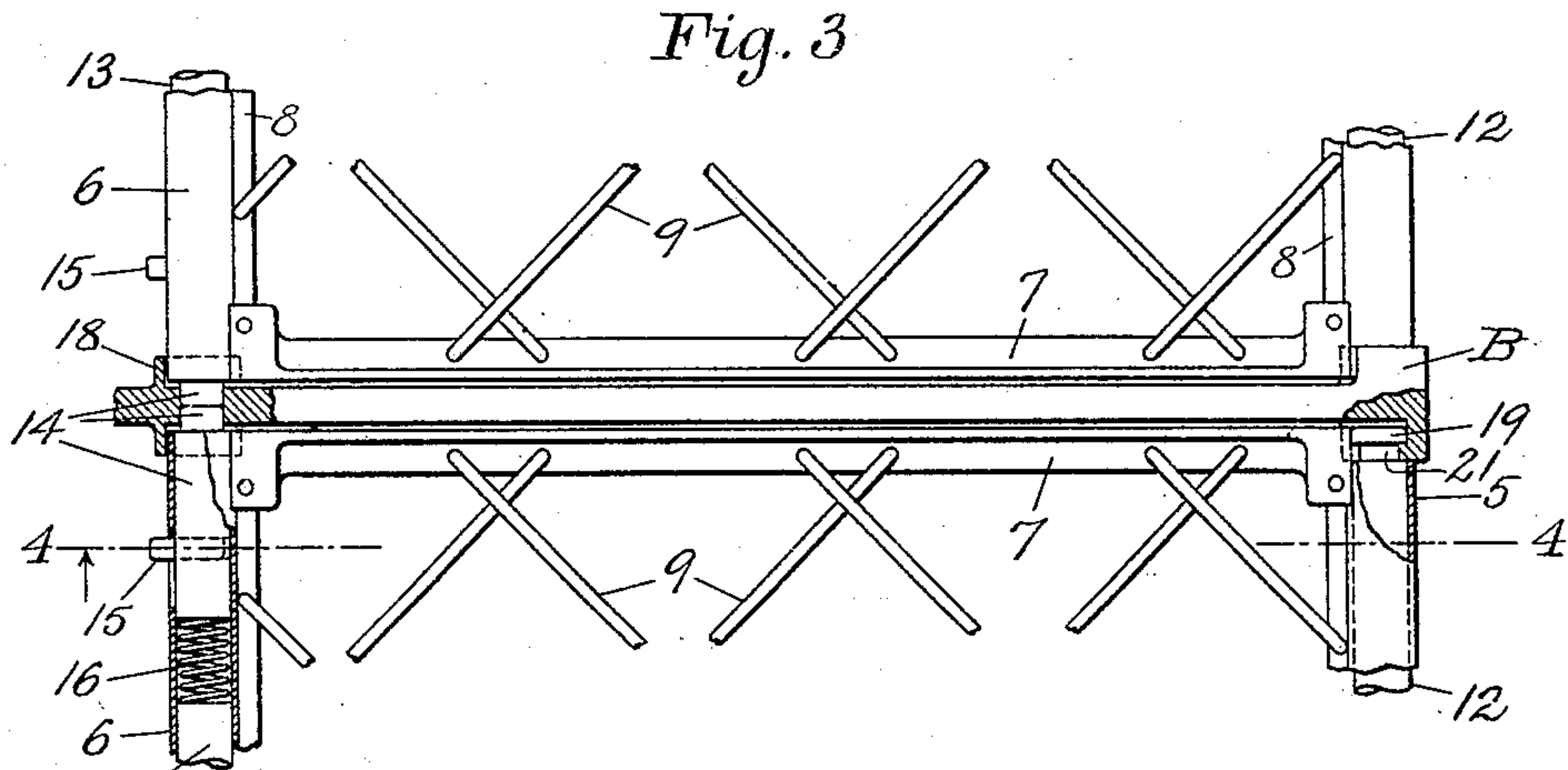
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2 SHEETS—SHEET 2.



Witnesses:
H. Mallner
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UNITED STATES PATENT OFFICE.

CHARLES P. HOWARD AND FRANK E. HOWARD, OF HARTFORD, CONNECTICUT, ASSIGNORS
TO JAMES L. HOWARD & COMPANY, A CORPORATION OF CONNECTICUT.

BAGGAGE-RACK.

No. 907,601.

Specification of Letters Patent.

Patented Dec. 22, 1908.

Application filed January 6, 1908. Serial No. 409,396.

To all whom it may concern:

Be it known that we, CHARLES P. HOWARD and FRANK E. HOWARD, citizens of the United States, and residents of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Baggage-Racks, of which the following is a full, clear, and exact specification.

10 This invention comprises improvements in baggage racks and similar structures.

The object of the invention is to provide an improved form and arrangement of rack which is simple, strong, compact and quickly erected or assembled; which can be interchangeably used in different cars, or in different portions of the same car, and which may be put in place and removed without any special wrenches or other special tools. Thus any rack section may be employed either as a single rack, or as an independent unit section of a continuous rack, the improvements including a construction whereby any rack bottom may be removed from any section without disturbing the other sections, and without disturbing the wall brackets. Inasmuch as the rack bottoms receive much harder usage when in service than the wall brackets, they require to be repaired and refinished much more frequently than the brackets; hence the desirability of thus making these rack bottoms separately and independently detachable, so as to enable any or all of the rack bottoms to be quickly and easily taken out and replaced independently of each other, and without removing the wall brackets. At the same time it is important to have these parts of simple, open and smooth construction, so that they may readily be finished and refinished in all portions. All these objects are attained in the present invention, which enables either a single rack, or an extended or continuous rack, to be made up of only two different parts, viz., wall brackets and rack bottoms. These rack bottoms or sections, although of light and open form are diagonally braced and otherwise so firmly and rigidly constructed as to form lattice girders which not only maintain their original form when detached; but are so attached to the brackets as to firmly brace and support the latter in position, thus forming simple but firm and substantial racks whether used separately, or in combination as a continuous or extended rack.

The invention moreover comprises improvements in construction which entirely dispense with the employment of loose and removable small parts such as screws, nuts, unions, etc., and so avoids the use of parts which may be readily lost, or which are liable to become loose and jar or rattle when in service.

Figure 1 of the drawings is a plan view showing a complete section, and portions of the adjacent sections of an extended or "continuous" rack. Fig. 2 is an end view projected from Fig. 1. Fig. 3 is a plan view in enlarged scale and partly in section, showing one of the wall brackets and illustrating the detail construction and method of attachment of the ends of the sectional rack bottoms thereto. Fig. 4 is an end view in section on the line 4—4 of Fig. 3, also illustrating the operation of putting in place or removing one of the sectional rack bottoms. Fig. 5 is a plan view in section on the line 5—5 of Fig. 4. Fig. 6 is a fragmentary end view showing the outer end of one of the wall brackets with its inwardly opening T-slot. Fig. 7 is a plan view partly in section showing the construction of the outer end portions of the racks and the adjacent portions of the wall brackets, and further illustrating the method of attaching and detaching the racks. Figs. 8, 9, 10 and 11 are detail views showing the construction and manner of attachment of the metallic clips for holding the lattice rod members firmly together at their joints. Fig. 8 is a plan view and Fig. 9 an end view projected therefrom, and in section taken on the line 9—9 of Fig. 8. Fig. 10 is an underneath view of one of these interlocking joints. Fig. 11 is an end view projected from Fig. 9 and in section taken on the line 11 thereof. Fig. 12 is a plan view, partly in section, showing a method of locking back the latches, and also showing a method of finishing the outer sides of the wall brackets.

In these drawings W represents the wall of the car or other structure on which these racks may be used.

B represents the wall brackets, the feet of which are attached to the side of the wall in the customary way.

A indicates in a general way one of the removable sectional rack bottoms or shelves. These sectional rack bottoms A are herein shown to be supported upon the brackets B at four points, two at each end. One pair of

these connections, preferably at the front side of the rack, is of the character of a separable hinge, while the other pair of supporting connections are provided with latch devices by which the rack bottom is firmly held in place, while permitting its ready removal when desired. By slipping the front ends of the rack into their coengaging supports at the front ends of a pair of adjacent brackets, thus practically hanging it on its hinges, as is illustrated in Fig. 4, and then swinging the rearward end of the rack downwardly upon its hinges to the latching position shown in Fig. 2, the rack bottom is secured in place in the brackets, as shown in Figs. 2 and 3. Obviously the hinged connection may be at the rearward side of the racks, and the latching connection at the front side. But for various reasons it is considered preferable to arrange it as shown herein, with the hinge portion at the front end and the latching portion at the rear end.

Our preferred construction of the coengaging hinging portions of the bracket B and of the racks A is best shown in Figs. 6 and 7. One of the coengaging members is provided with a T slot, and the other with a T head. In this preferred construction the bracket B is provided on each side of its front end with a projecting hub in which is formed an undercut recess 20, thus forming approximately a T slot for receiving an approximately T shaped head 19 which is formed at each end of the front member of the rack frame. The T slot 20 may be open either forwardly or backwardly. But in the present instance it is shown to open backwardly toward the other point of support upon the bracket B, this however, being mainly for appearances, to avoid having the opening of the slot appear at the front side of the rack. In any case the T slot should open in a direction which does not permit of the displacement of the rack bottom at the hinged end when it is latched in its position of service, the intention being first to unlatch and raise the rearward end, and then draw the rack bottom backwardly out of the T slots, thus unhinging and releasing it. This direction of disposal of the T slot enables it to support the front bar 5 of the rack section firmly against the upward and downward shocks to which it is liable when in use, due to heavy baggage striking against the under side when being lifted to place in the rack, or being thrown heavily upon the upper side of the bar.

The rearward supporting connection between the bracket B and the rack bottom consists of a hub containing an aperture 17 for receiving the latching bolt 14, which is at each end of the rearward side of the rack bottom. In addition to the aperture 17 for receiving the bolts we preferably employ a curved flange or half hub 18 which extends outwardly beneath the principal rearward

member of the rack frame, thus supporting the rearward side of the rack independently of the bolts 14. This additional support 18 for the frame makes it easier to retract the bolts; and prevents the rack bottom from falling out if the bolts should be retracted when in use, either by accident or mischievously. The flange 18 extends beneath the rearward end of the rack section so as to support its weight and the weight of the baggage upon it, and also extends behind the rack, as indicated in Figs. 3 and 4, so as to take the backward thrust that may be due to throwing heavy pieces of baggage against the outer front member 5 of the rack.

Each of the rack bottoms A is a composite structure, but made up in such a way as to form a single integral removable part, which is removed bodily from between the brackets B without removing or loosening any screws, nuts, or other extra parts which might drop, or be lost, or mislaid, or which might become loose and rattle when in service. Moreover, the self-contained structure of these integral rack bottoms is such that no screw drivers, wrenches, or similar special tools are required for removing and replacing them. In their preferred construction shown herein, each of these rack bottoms consists of an open rectangular frame, the front and back members consisting of tubes 5 and 6, of well known construction, in which the tube is compressed so as to form longitudinal fins 8, which extend inwardly toward each other. At or near the ends of the tubes they are united by cross braces 7 which may be of any approved form, suited for the strains to which they are subjected. In the present instance they are of T-shaped cross-section, one rib or fin of which extends inwardly in the plane of the longitudinal ribs or fins 8 of the tubes 5 and 6, the ends of the braces being preferably grooved to receive the said fins and being firmly riveted thereto, thus forming a firm rectangular frame.

The interior of the rectangular frame is provided with a diagonal lattice, consisting of separate stiff rods which are disposed in a diagonal relation to the frame, crossing each other to form a square or diamond shaped open lattice. These rods are attached at their ends to the fins 8 and the ribs of the cross-braces 7 preferably by drilling holes through the latter to receive the ends of the rods, those ends being first turned at right angles to the rods for ready insertion in the proper places, after which they may be turned further so as to clench the end and prevent it from being inadvertently retracted from its place, at the same time serving to tighten the structure. These rods 9 are adapted in size and arrangement to form diagonal struts or compression members for the rectangular frame, as well as serving as

tie or tension members therefor. These rods are firmly interlocked at each of their intersections, thus not only holding each of them in a straight line to increase their stability as strut members, but also adapting them to distribute the strains from one to the other. The interlocking joints are made by forming short U shaped bends in opposite directions at each joint of intersection, as best shown in Figs. 8 to 11 inclusive. These bends are formed in the rods before assembling them. All these U-shaped bends of a rod may be in the same direction for one of the series and in the opposite direction for the other series, so that the series which extend in one direction all lie on the same side of the series extending in the opposite direction. We prefer, however, as herein shown, not only to cross, but to interweave the two series of rods, in which case the U-shaped bends in any given rod will be alternately in opposite directions, up and down. In order to still further increase the security and stability of the intersecting joints of the rods 9, they are preferably provided with metallic clips 10, shown in larger scale in Figs. 8 to 11 inclusive. These clips may be of any desired form. Our preferred form of clip is, however, made by suitably punching and bending pieces of sheet metal, so as to conform to the U-shaped crossing joints of the wires. An aperture 37 is preferably made in the back of the clip as shown in Fig. 10 to receive the most deeply bowed portion of the U-shaped bend, the back or hump of which may thus project through the aperture as best shown in Fig. 9. This avoids undue thickening of the joint, which thus need not exceed the thickness of the two crossing wires, and these may, if desired, be flattened at the crossing point, if the further reduction of thickness is found to be desirable. These clips thus underlie one of the crossing wires, while its ends 36 extend over and are clenched upon the opposite crossing wire, thus holding the interlocking joints of the rods closely together.

The T heads 19 at the ends of the front members 5, which serve both as hinge members and as tie and strut members for connecting the outer ends of the brackets together, may be made by turning annular grooves 21 in the projecting ends of the rods 12, thus forming the annular T heads 19, which project into the annular recess 20, the abutting shoulders of the coengaging members forming firm interlocking endwise engagement, by means of which the outer ends of the brackets and the front side of the rack, of whatever length, are firmly and stiffly supported in an endwise direction; and in both of those directions. The rods 12 may extend the entire length of the respective rack sections, or they may be short pieces brazed in the ends of the tubes 5, this being a matter dependent upon the size and thick-

ness of the walls of the tube 5 and the amount of strength required.

Each rack section when assembled and disassembled operates after the manner of a gate, swinging on separable hinges at its front side, and being latched or otherwise held in its service position at its rearward side. As herein shown the ends of the rearward member 6 rest upon the flanges 18 which project from the side of the bracket and thus support the rearward side of the rack section or bottom with its bolts 14 in alignment with its receiving apertures 17 of the bracket. The bolts 14 are herein shown, preferably cylindrical, and are seated in the ends of the tubular members 6, being backed by springs 16 which tend to urge the bolts 14 into their apertures 17. In order to enable the bolts to be conveniently retracted they are provided with pins 15 which extend outwardly through slots 22 in their casing, which in the instance here shown is the rearward tubular member 6 of the frame. When, however, these members are not of a tubular character, the bolts 14 may obviously be seated in any other properly shaped and disposed guide or casing.

The operating pins 15 of the bolts 14 preferably project on the rearward side of the frame so as to be out of sight when in use, not only for appearance, but to reduce the liability to mischievous or malicious tampering. The bolts may ordinarily be withdrawn by the fingers, supplemented where necessary by a screw driver, chisel, or almost any simple piece of wood or metal. If it is considered desirable to fasten the bolts in their retracted position the slots 22 may be extended sidewise as shown in Fig. 8, forming the well-known bayonet joint, by means of which the pins 15 may be held in their retracted position during the removal of the rack section, remaining thus retracted if desired until the rack is again placed in position.

It is generally found desirable to provide racks of this character with a bar or stop member at the back of the rack to prevent baggage from being thrown against the wall of the car, and thereby injure its interior finished surface. We therefore provide a stop bar or back rod 26, which when the rest of the rack is of brass or other expensive metal, may be a thin brass tube reinforced by an inner rod 25 of steel or other less expensive metal. One end of the back rod 26, or of the reinforcing rod 25 may be extended as shown at 27, to enter the aperture 28 in the bracket B, the opposite end of the rod being provided with a bolt 31, a spring 32, and operating pin 33, as shown in Fig. 5. The end of the bolt 31 is adapted to enter the aperture 28 of its adjacent bracket. Each projecting end of the back rod enters the aperture 28 only half way, leaving the other half of the length of

the aperture for receiving the corresponding rods and bolts of the adjacent sections. The seats in the bracket B for the stop rods 26 are preferably reinforced by means of the curved flanges 29, similar to the flanges 18, which support the ends of the back rod against the strains to which it may be subjected by having the baggage thrown against it from the front. This construction and arrangement of the racks and brackets enables them to be manufactured in large quantities, and on the interchangeable plan, a convenient standard of length being adopted for the individual unit section. In putting up these racks the brackets B are first secured to the walls at a suitable distance apart. Then one of the rack bottoms is placed in position, being first presented as indicated by the position of the left hand rack in Fig. 7, from which position it is pushed backwardly to the position shown in Fig. 4, the rearward or latching side of the rack being held in its raised position. When the rack is drawn forwardly to the position shown in Fig. 4, so that its hinged portions are in engagement with the brackets as shown by the right hand rack of Fig. 7, the rearward end of the rack may be swung downwardly, resting upon flanges 18, the bolts 14 being meanwhile retracted by hand, or being held back by the use of the bayonet lock shown in Fig. 8. Then the bolts 14 are released and are projected into the apertures 17 of the brackets, thus locking the rack in position, being released from that position only by again retracting the bolts 14, lifting the rearward end of the rack section upwardly to the position of Fig. 4, and then pushing it back far enough to separate the hinged ends of the front side. The stop rod 26 is placed in position by merely inserting the end 27 in the aperture 28 in one bracket, and then retracting the bolt 31 and swinging the stop rod into alinement with the aperture 28 into which the bolt 31 is then projected, thus locking it in place, from which it can be removed only by retracting the bolt 31. It is in several ways advantageous thus to make the lattice rods of separate and independent pieces, instead of casting them in one piece with each other, or with the surrounding frame. This construction permits of the selection of a material for the rods suited in tensile strength and temper for the special service and special strains to which these rods are subjected in use. Moreover, if one rod, or a number of rods, become bent or stretched, or otherwise deformed, so that the lattice sags or becomes "baggy", the stretched members may be removed and a corresponding number of new rods put in their places, thus completely repairing the damage without throwing away the entire lattice, and perhaps also the entire frame. Furthermore, these rods may thus be made of drawn metal, increasing their capacity for

resisting the stretching and bending strains to which they are subjected, and also giving them a smooth and if desired, a polished surface, thereby enhancing their finished appearance and enabling them to be cleaned and refinished to better advantage.

The structure here shown and described may be modified in various ways, as to pattern or style, and may be of various metals, or finished in different colors, to match or suit the style, pattern or finish of the car, or of other associated trimmings. The outer sides of the end brackets may, instead of being provided with the T-slots 20, flanges 18, and locking apertures 17 and 28, be finished off smoothly. Or they may be provided with hubs like the hub 39 in Fig. 12, threaded or otherwise adapted to receive a finishing ball or knob, like the knob 40 of Fig. 12, or be provided with any other finish or embellishment in accordance with the taste of the designer, or to suit the style or finish of their surroundings. In various ways which will be obvious to the draftsman or designer, the various features of this invention may be modified in form, arrangement, and finish, to suit different environments or different conditions of service.

We claim as our invention:—

1. A rack bottom comprising a frame composed of rods united near each end by cross braces, and of two separate series of stiff rods crossing each other and disposed diagonally of the said frame, and attached at their ends to the frame whereby they resist deformation of the frame.

2. A unit rack bottom for baggage racks, comprising an open frame composed of a front rod and a back rod united near their ends by cross braces, and of a lattice web within the frame consisting of two separate series of stiff rods crossing each other and extending diagonally of the frame and connected thereto at their ends, whereby the rods serve both as struts and as tie members to resist deformation of the frame.

3. A unitary removable rack bottom for baggage racks, having in combination a frame consisting of a front rod and a back rod, cross braces riveted to and connecting the said rods approximately at their ends, and a lattice web within the frame consisting of separate stiff rods attached at their ends to the frame and crossing each other diagonally of the said frame, the rods at each of said crossings being bent partly around each other to form short U-shaped interlocking bends.

4. A unitary removable rack bottom for baggage racks, having in combination a frame consisting of a front rod and a back rod, cross braces riveted to and connecting the said rods approximately at their ends, and a lattice web within the frame consisting of separate stiff rods attached at their ends to the frame and crossing each other diagonally

of the said frame, the rods at each of said crossings being bent partly around each other to form short U-shaped interlocking bends, and metallic clips at the said crossing joints clamping the interlocking portions of the said rods together.

5. In a baggage rack, the combination with wall brackets, of a rack bottom consisting of a rectangular frame composed of a front and back rod united by cross braces near their ends, and of separate stiff rods having hooked ends attached to the said frames and disposed diagonally thereof, and crossing each other, to serve both as struts and tie members to resist deformation of the rectangular frame in opposite directions.

6. In a baggage rack, the combination with wall brackets, of a rack bottom consisting of a rectangular frame composed of a front and a back rod rigidly united near their ends by cross braces, and of two series of separate stiff rods disposed diagonally of the frame and interlocking each other, the ends of the said rods being hooked into the said frame, whereby deformation of the rectangular frame is resisted in both directions.

7. In a baggage rack, the combination with wall brackets, of a rack bottom consisting of a rectangular frame composed of a front and a back rod rigidly united near their ends by cross braces, and of two series of separate rods disposed diagonally of the frame and hooked thereto by the ends of the rods, the two series of rods crossing each other diagonally, the rods at each crossing joint being bent partly around each other to form interlocking joints.

8. In a baggage rack, the combination with wall brackets, of a rack bottom consisting of a rectangular frame composed of a front rod and a back rod rigidly united near their ends by cross braces, and of two series of separate rods disposed diagonally of the frame and hooked thereto by the ends of the rods, the two series of rods interlocking each other diagonally, the rods at each crossing joint being bent partly around each other to form interlocking joints, and metallic clips engaging the two members of each joint and holding them in their interlocking position.

9. A unit rack bottom for baggage racks, comprising a rectangular frame provided on each of its four sides with an inwardly projecting fin, and a lattice web within the said frame consisting of separate rods crossing each other diagonally of the frame and attached at their ends to the said fins to form rigid struts and tie members for bracing the rectangular frame.

10. A unit rack bottom for baggage racks, comprising a rigid rectangular frame provided on all four inner sides with an inwardly projecting fin thinner than the frame members, and an open stiffening web within the said frame comprising separate stiff rods ex-

tending diagonally of the frame and interlaced with each other to form an open lattice, the ends of the rods being secured to the said fins.

11. A unit rack bottom for baggage racks, comprising a rigid rectangular frame composed of four members rigidly fastened together at their ends, and each provided with an inwardly projecting fin thinner than the frame members, and a stiffening lattice web within the said frame comprising separate stiff rods crossing each other diagonally of the frame, and rigidly connected at their ends to the said fins of the frame.

12. A baggage rack comprising a pair of wall brackets and a removable rack bottom, the said brackets and the corresponding ends of the rack bottom being provided with coengaging shoulders opening only in a rearward direction relative to the bracket to permit the insertion and removal of the rack only from the rearward side of the bracket shoulders.

13. A baggage rack comprising a pair of wall brackets and a removable rack bottom, the said brackets and the adjacent ends of the rack bottom being provided with hinge-like connections separating in a rearward direction relative to the bracket to permit the hinging and unhinging of the rack in a rearward direction relative to the bracket.

14. A baggage rack consisting of a pair of wall brackets and an integrally removable rack bottom, each bracket and the adjacent end of the rack bottom being provided with sidewise opening coengaging hinge members, and means for latching the said rack to prevent the disengaging sidewise movement of the hinge members when in service.

15. A baggage rack consisting of a pair of wall brackets and an integral detachable rack bottom, each bracket and its adjacent end of the rack bottom being provided with a coengaging T head and T slot opening in a sidewise direction relative to the length of the rack, and latch mechanism for holding the said T head and T slot in coengaging relation when in service, but permitting their ready disengagement when desired.

16. A baggage rack consisting of a pair of wall brackets and a removable rack bottom, each of said brackets being provided with means for supporting the adjacent end of the rack bottom at two places, one of said supporting connections consisting of a T head and a T slot opening toward the other supporting connection of the bracket, and the said other supporting connection including a retractable bolt for engaging with the bracket to maintain the said T head and T slot connection in coengagement during service, while permitting disengagement thereof when desired.

17. A baggage rack comprising two wall brackets, a removable sectional rack bottom

having a tubular front member and a tubular back member extending longitudinally of the section, one of said members engaging at its ends with the respective brackets by means of a T head and T slot connection, and the other tubular member being provided at each end with a retractable bolt for engaging with the respective brackets.

18. A baggage rack consisting of two wall brackets, an integral removable rack bottom disposed between the two brackets and having two supporting connections therewith at each of its ends, one of the said connections being a detachable hinged connection having endwise holding shoulders for maintaining the spacing of the brackets, and the other of said connections including retractable bolt devices for locking the said rack bottom in place and preventing its unhinging movement.

19. A baggage rack having in combination a rack bottom, two wall brackets provided with means for supporting their respective ends of the rack bottom at two places, one of said supporting connections consisting of a hub on the side of the bracket provided with a sidewise opening T slot, and a coengaging portion of the rack being provided with a corresponding T shaped head forming a separable hinge connection with the said T slot.

20. A wall bracket for baggage racks, having in its side face a recess provided with a shoulder substantially parallel with the bracket for receiving and detachably holding the end of a removable rack section.

21. A wall bracket for baggage racks, having a T slot in its side face for receiving and supporting an end portion of a sectional rack.

22. A wall bracket for baggage racks, having a T slot and a supporting flange at different portions of its side face for receiving and supporting the end of a removable rack bottom.

23. A wall bracket for baggage racks, having in its side face a supporting flange, and a T slot extending in the general direction of the said flange, for receiving and supporting the end of a removable rack section.

24. A wall bracket for baggage racks, having in its side face a supporting flange, a locking aperture, and a T slot opening in the general direction of the said flange and aperture, for receiving and supporting the end of a removable rack section.

25. A wall bracket for baggage racks, having on its side face a projecting flange, and a projecting hub provided with a T slot extending and opening in the general direction of the said flange, for receiving and removably supporting the end of a removable rack section.

26. A wall bracket having on each of its opposite side faces a sidewise opening shouldered recess for receiving the ends of detachable racks and supporting them against endwise movement.

27. A wall bracket for baggage racks, having in each of its opposite side faces means for supporting the adjacent ends of two removable sectional racks, including a supporting flange and a recessed T slot substantially parallel with the faces of said bracket, and opening in the general direction of the said flange.

28. A wall bracket for continuous baggage racks, having on each side face means for supporting the adjacent ends of removable rack sections, consisting of a projecting hub and a projecting flange, the hub being provided with a shouldered recess opening in the general direction of the said flange, and the flange forming a seat for the rearward member of the rack section and opening in an upward direction to permit upward swinging movement of that side of the rack.

29. A wall bracket for continuous baggage racks, having upon each side face means for supporting the adjacent ends of removable rack sections, consisting of a projecting hub provided with a shouldered T slot opening in a generally rearward direction, and a flange at the rearward end of the bracket forming a seat for the rearward side of the rack section and opening in a generally upward direction to permit upward swinging of the rearward side of the rack.

30. The combination with the wall brackets of baggage racks, of a removable back stop extending from one bracket to the other, and having shoulders abutting against the respective brackets, and means for removably latching the back stop to the said brackets.

31. The combination with the wall brackets of baggage racks, of a back stop extending from one bracket to the other and provided with shouldered end portions abutting against the said brackets, and latching bolts entering apertures in the said brackets, one of the said latching bolts being retractable for removing and replacing the back stop.

32. The combination with the wall brackets of baggage racks, of a back stop consisting of a tubular member extending from bracket to bracket, and bolt members at each end of the back stop entering seats in the said bracket, one of the said bolt members being retractable to facilitate removal and replacing of the back stop.

33. The combination with wall brackets of baggage racks, a removable back stop therefor comprising a tubular member extending from one bracket to the other, bolt members projecting from the ends of the tubes to enter apertures in the brackets, one of the said bolts being mounted to telescope within the said tube, and a spring for pressing the said bolt to its latching position.

34. In a car-rack, the combination with two brackets provided upon their faces with inwardly projecting bearing sockets, of a unitary shelf structure adapted at its ends to be
5 interlocked with the said sockets against longitudinal movement, and means for locking the structure against movement in a vertical plane with respect to the brackets.

35. In a car-rack, the combination with
10 two brackets formed upon their inner faces with inwardly projecting U-shaped bearing sockets formed with locking grooves, of a unitary shelf structure comprising tubes provided at their ends with locking flanges
15 adapted to enter the said grooves, and means

for locking the said structure against vertical movement with respect to the brackets.

36. In a car-rack construction, the combination with a plurality of brackets formed upon their opposite faces with aligned oppositely projecting bearing sockets open at their sides and ends, of a plurality of unitary shelf structures adapted at their ends to be entered into and interlocked with the said bearing sockets of the brackets.

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