June 21, 1938. C. A. GEHRET 2,121,658

EXHIBITION BENCH

Filed Aug. 6, 1936

Fig. 1.

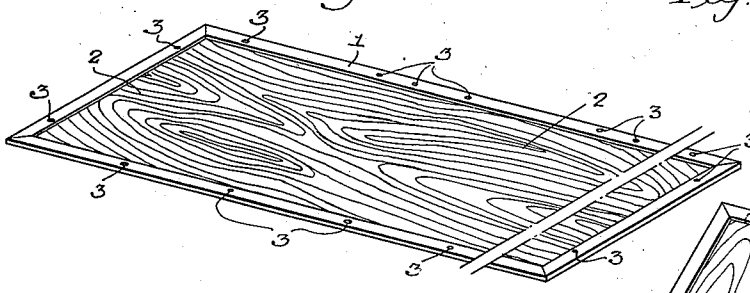


Fig. 6

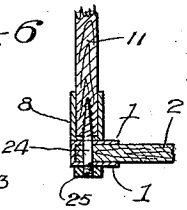


Fig. 3.

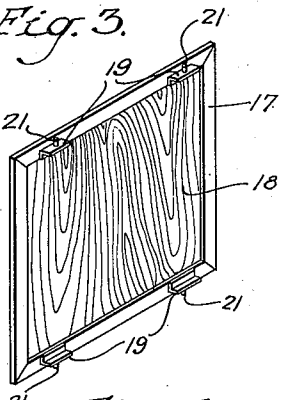


Fig. 2

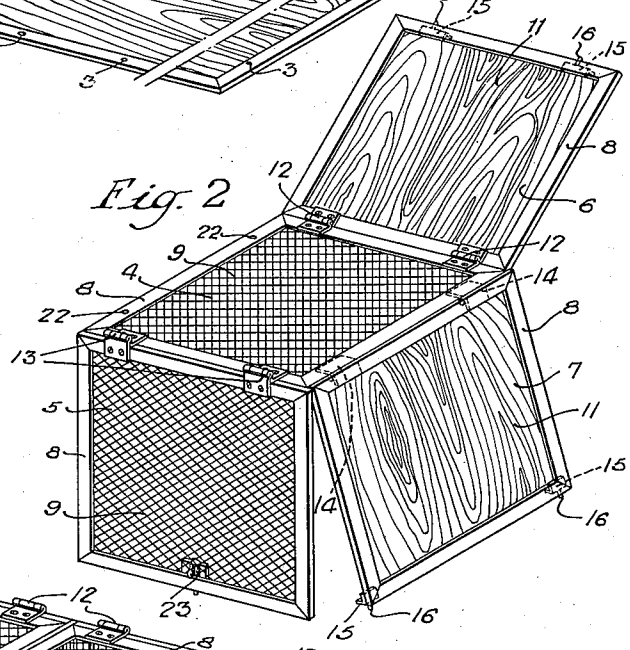


Fig. 4.

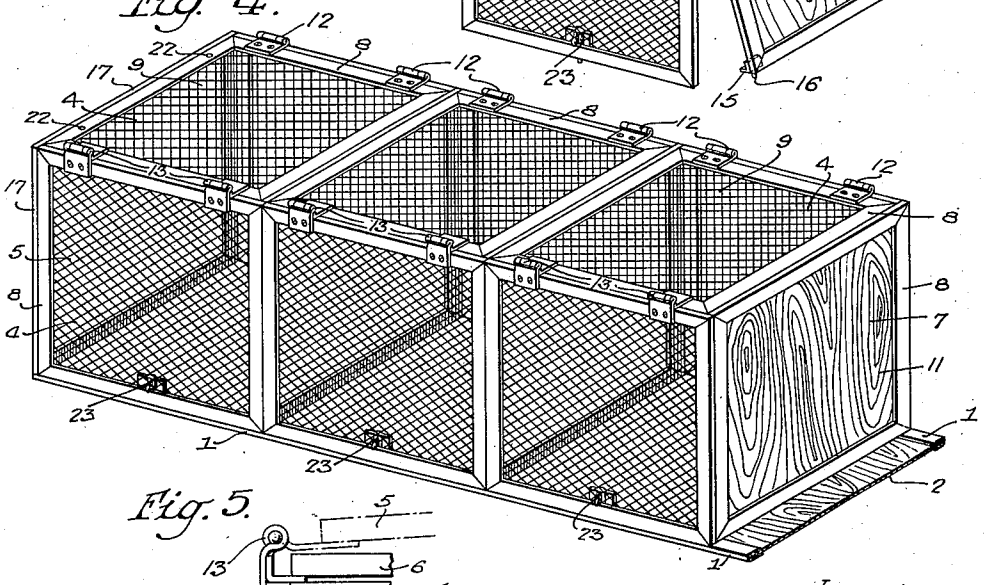
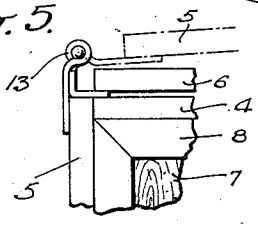


Fig. 5.



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Patented June 21, 1938 2,121,658

UNITED STATES PATENT OFFICE

2,121,658

EXHIBITION BENCH

Charles A. Gehret, East Norriton Township, Montgomery County, Pa.

Application August 6, 1936, Serial No. 94,681

1 Claim. (Cl. 119—17)

This invention relates to improvements in exhibition benches of the character used in dog shows or commercially for display of canine and other live stock.

A principal object of the invention is to provide an exhibition bench construction of improved knock-down type, said bench being characterized by the inclusion of a relatively few individual parts, simplicity of form and assembly, and ruggedness and durability.

A more specific object of the invention is to provide an exhibition bench structure comprising a plurality of standardized units or cage-forming elements each adapted to be folded into a relatively small compass and being readily assembled and disassembled into and from the "set-up" structure.

An exhibition bench made in accordance with my invention is illustrated in the attached drawing, in which:

Fig. 1 is a view in perspective of the base member which in assembly forms the floor of the individual cage units;

Fig. 2 is a view in perspective of one of the standardized cage units;

Fig. 3 is a view in perspective of the end panel which with the base member and the various cage units completes the assembled structure, as hereinafter described;

Fig. 4 is a view in perspective of the bench in partial assembly;

Fig. 5 is a fragmentary view showing a detail of the construction, and

Fig. 6 is a fragmentary sectional view showing a modification within the scope of the invention.

With reference to Fig. 1, the base member or floor panel of elongated rectangular form comprises a metallic frame 1, the longitudinal and transverse members of which are formed preferably, though not necessarily, of channel sections; and a panel or body element of sheet material, such for example as ply wood, the edges of which are embraced by the channel frame elements. This panel may be of any length desired or required to accommodate a specific number of individual cage units, as hereinafter described. It will be noted that the frame elements 1 are provided with apertures 3, the function of which is also hereinafter described.

The bench structure further comprises a plurality of standardized cage units, one of which is shown in Fig. 2. Each of these units comprises a top panel 4, front and rear panels 5 and 6 respectively and one side panel 7, each of these panels being secured by suitable hinges to the edges of the top panel. Each of the top and front panels 4 and 5 comprises a suitable rectangular frame 8 preferably of channel section which supports the wire or other mesh 9 which constitutes the body of the panel. The rear and side panels 6 and 7 also each comprise a rectangular frame 8 similar to the frames of the panels 4 and 5, but instead of wire mesh the bodies of these panels are composed preferably of solid sheet material 11, such for example as ply wood.

The rear panel 6 is secured to the rear edge of the top panel 4 by means of hinges 12 which are secured to the outer faces of the respective panels and which permit the rear panel 6 to be folded flatly against the upper face of the top panel 4. The front panel 5 is secured to the front edge of the top panel 4 by means of hinges 13, 13 also secured to the outer faces of the respective panels, and the hinge elements are extended and offset as shown in Fig. 5 so that the pintles lie well above the top edge of the front panel 5 to permit this panel being folded upwardly over the top of the panel 4, and to lie flatly upon the panel 6 after the latter has been folded over upon the top panel 4 as previously described, see Fig. 5. The side panel 7 is secured to the side edge of the top panel 4 by means of hinges 14 which are secured to the inner faces of the respective panels so as to permit the side panel 7 being folded under and to lie flatly against the under face of the panel 4. When so folded, the panels lie snugly flat against each other and occupy a minimum of space.

Each of the panels 6 and 7 is provided at its lower or outer edge and on its inner face with a pair of angle brackets 15 which when the units are assembled with the base panel 1—2 bear upon the upper faces of the frame elements of that panel, and each of the brackets 15 is provided with a pin 16 which pins are adapted to enter the apertures 3 in the longitudinal elements of the frame 1 to thereby in effect interlock these panels with the base member. The apertures 3 in the longitudinal frame elements of the base panel are relatively so arranged that the cage units when assembled thereon will lie in contiguity to each other, as illustrated in Fig. 4, so that the side panel 7 of one cage unit may form the opposite side panel of the adjoining cage unit, but one of the cage units occupying an end position on the base panel will be left with an open side which must be closed to complete that unit. To this end, I provide a separate end panel illustrated in Fig. 3, which con-

sists of the typical rectangular frame 17 and a body member 18 combined with the frame 17, as previously described, and formed preferably of solid sheet material, such as ply wood. The upper and lower members of the frame 17 are provided with angle brackets 19 which form bearings for this end panel upon the base frame and also a support for the associated cage unit, which in assembly rests upon the brackets 19 at the upper edge of the panel. Each of the brackets 19 is provided with a pin 21, the pins of the lower brackets entering the apertures 3 in the transverse elements of the base frame 1, and the pins of the upper brackets of the end panel being adapted to enter apertures 22, 22 in the frame of the upper panel 4 of the associated cage unit. By this means, the end panel 17—18 is securely locked to the base panel and to the frame of the associated cage unit and forms one side of, and a support for, the said unit. The front panel 5 of each of the cage units is provided at its lower edge with a spring bolt 23, which is adapted to enter an appropriately placed aperture 3 in the frame of the base panel 1—2. By retracting this bolt 23, it will be apparent that the front panel 5 may be elevated on the hinges 13 to give access to the interior of the cage.

In Fig. 6 I have illustrated a modification wherein the pin brackets 15—16 have been replaced by a stud 24 which passes through a hole drilled in the metal frame 3 and is screwed into the wood or other panel 11. The outer end of this stud forms the pin which extends in the frame 1 of the floor panel as previously described; and this outer end may be extended and threaded, if desired, for reception of a nut 25 to positively fasten the cage units to the floor panel. This form of pin may also be used at the bottom of the panel 17—18 in place of the bracket 19—21.

From the foregoing description, it will be noted that the bench structure comprises the base panel 1—2, which may vary in longitudinal dimension in accordance with the number of cages required, a single end panel 17—18 and one or more of the cage units 5—6—7—8. It will be noted further that the cage units are of identical and standardized construction and may be used in any required number or in accordance with the capacity of the particular base panel employed. It will be noted further that the cage units may be removed individually from the base structure without affecting the other units, with the exception, of course, of that one of the end units which employs the separate end panel 17—18.

The structure is characterized by its extreme simplicity of construction, the ease of assembly and disassembly, its flexibility as to choice of the number of cage units to be used, and the ability to fold the individual cage units into relatively small compass for storage or transportation.

I claim:

In an exhibition bench, the combination with a base panel, of a plurality of cage units each comprising a top panel, front and rear panels and one side panel and adapted to be mounted on the base in series arrangement and with the open side of each unit at the closed side of an adjoining unit, and detachable means for closing the open side of the terminal unit of said series, said front, rear and side panels being hinged to the edges of the top panel, and said hinges being constructed and arranged to permit the folding together of said front, rear and side panels in face-to-face relation with the top panel, cooperative means on the base panel and at the bottoms of said rear and side panels for interlocking said panels with the base whereby said rear and side panels may function jointly and with the base as a stable and substantially rigid supporting frame for the individual unit maintaining said unit in its rectangular form, and leaving said front panel free to swing as a top-hinged door on the top panel, and means for releasably locking the front panel in its normal closed position.

CHARLES A. GEHRET.