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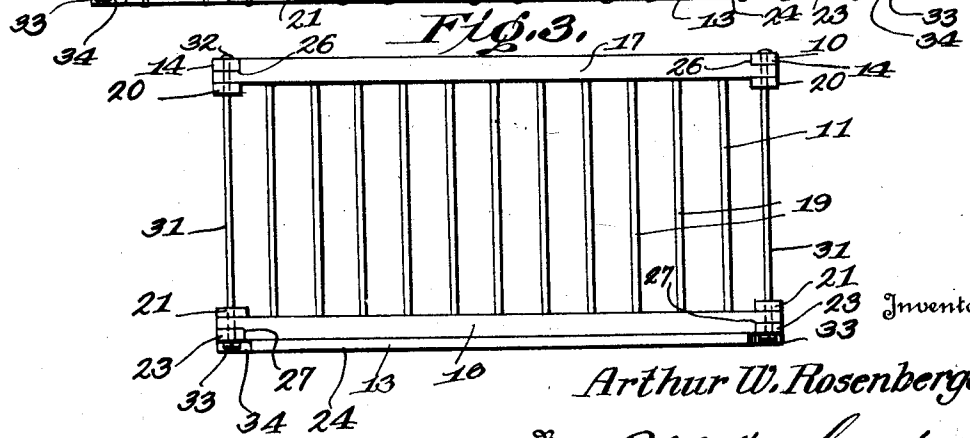
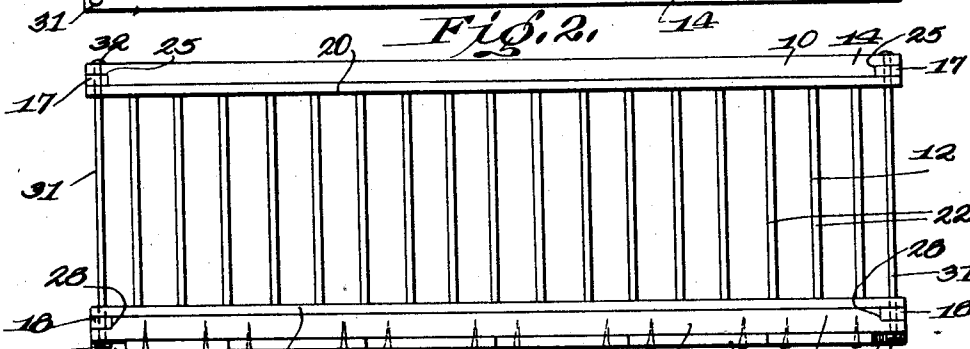
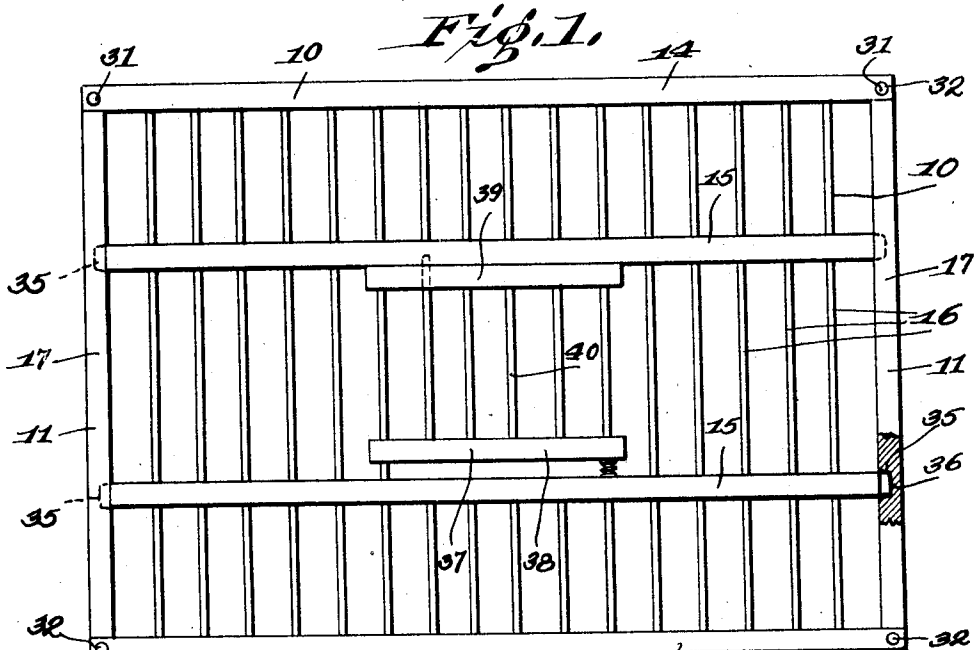
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A. W. ROSENBERGER

COOP OR CRATE

Filed June 20, 1927

2 Sheets-Sheet 1



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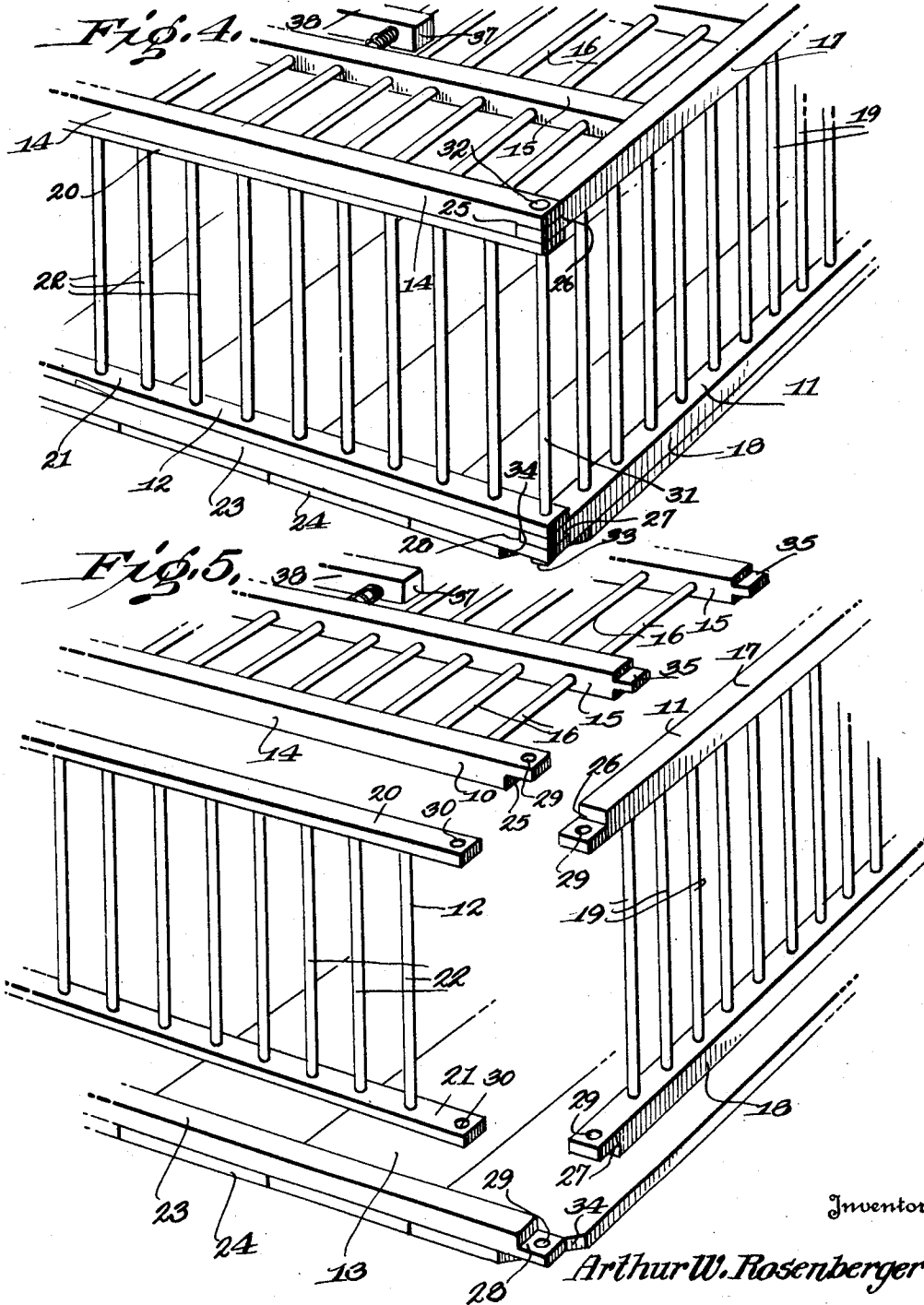
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UNITED STATES PATENT OFFICE.

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COOP OR CRATE.

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The present invention relates to a coop or crate, and aims to provide a novel and improved device of this character which may be conveniently knocked down for compactness in shipping by parcel post as well as to occupy a small space in storage, and when assembled will form a strong and durable coop or crate that will withstand the rough treatment articles of this character are subjected to.

Another object of the invention is the provision of a coop or crate having detachable side, end, top, and bottom sections, which are securely connected together at the corners of the top and bottom sections by means of bolts passed from the top section to the bottom section and through the side and end sections to thereby provide a knockdown coop of substantial construction.

It is also an object of the invention to provide a coop of this general character which is not only simple and substantial in construction but can be manufactured economically, and will be thoroughly efficient and practical in use.

With the foregoing and other objects in view, which will be apparent as the description proceeds, the invention resides in the construction and arrangement of parts, as hereinafter described and claimed, it being understood that changes can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a top plan of my improved coop or crate,

Figure 2 is a side elevation of the same,

Figure 3 is an end elevation,

Figure 4 is a perspective view of one corner of the coop or crate, and

Figure 5 is a similar view to Figure 4 showing the various sections disconnected.

In carrying out the invention, the numeral 11 designates the top section, the numeral 12 the end sections, the numeral 13 the bottom section. The top section 10 consists of a pair of spaced apart end bars 14, intermediate bars 15, and a plurality of staves passed through the intermediate bars 15 and having the ends thereof attached to the end bars 14, said staves being designated by the numeral 16. Each of the end sections 11 consists of an upper bar 17, a lower bar 18, and

a plurality of staves or rounds having their opposite ends attached to the upper and lower bars. The side sections 12 are of a construction similar to the end sections 11, each having an upper bar 20 and a lower bar 21 which have arranged therebetween a plurality of staves or rounds 22. The bottom section is constructed to present a pair of cleats 23 which are spaced apart to lie beneath the lower bars 21 of the side sections when the coop or crate is assembled and to which boards 24 are attached at their ends to form the bottom of the coop, said boards being arranged so that the edges thereof are in close proximity to each other.

The end bars 14 of the top section 10 are cut away at their lower sides at opposite ends, as indicated by the numeral 25, said cut away portions extending upwardly one-half the thickness of the bars, while the opposite ends of the upper bars 17 of the end sections 11 are cut away at their upper sides, as at 26, said cut away portions in the bars 17 being of a depth similar to the cut away portions in the bars 14. By cutting the bars 14 of the top section away on their lower sides and cutting the ends of the bars 17 of the end sections away on their upper sides, it can be seen that the bars may be arranged in overlapped relation on the same plane after the manner of a lap-joint, though obviously any other well known form of joint may be substituted therefor. The lower bars 18 of the end sections and the cleat bars 23 of the bottom section 13 are cut away in a similar manner, the difference being that the lower bars 18 of the end sections 11 are preferably cut away on their under sides, as at 27, while the cleats 23 are cut away on their upper sides, as at 28. The upper and lower bars of the side sections 12 are spaced apart a sufficient distance so that the upper bars 20 thereof will lie beneath the bars 14 of the top section, while the lower bars 21 will lie above the cleat bars 23 of the bottom section 13, as clearly illustrated in Figure 4 of the drawings, and the plain ends of these extend beneath and above the bars 17 and 18 of the end sections 11 respectively. In the joints formed by the overlapped ends of the bars 14 of the top section, bars 17 and 18 of the end sections 11, and cleat bars 23 of the bottom section 13 are openings 29, which are adapted to align with one another when the top section, end sections, and bottom sec-

tion are arranged together or assembled to form the coop, while in the opposite ends of the upper and lower bars 20 and 21 of the side sections are provided similar openings 5 30 which also align with the openings 29 in the first mentioned bars. Through the aligned openings 29 and 30 are passed bolts 31, having heads 32 on their upper ends which engage the end bars 14 of the top section 10 and on their lower ends are threaded nuts 33 which engage the under surfaces of the cleat bars 23 of the bottom section 13, and it will be noted that a bolt is located at each corner of the coop or crate and that 15 by tightening the nuts 33 after the bolts are arranged in place all sections of the coop will be attached together in a rigid manner. The end boards 24 of the bottom section 13 have the outer corners thereof cut away, as 20 at 34, the purpose being to prevent the lower ends of the bolts 31 and the nuts 33 from projecting below the under surface of the bottom section 13 so that any number of coops or crates may be stacked one upon another without the lower ends of the bolts 25 and nuts interfering.

The intermediate bars 15 of the top section 10 have their opposite ends cut away on opposite sides for providing tongue extensions 30 35 thereon which are received in notches 36 in the inner faces of the upper bars 17 of the end sections 11. By having the extensions 35 of the top engage in the notches 36, sagging of said top is prevented, as the end walls will prevent such sagging. 35 Also by providing this structure, the end sections 11 are prevented from being forced inwardly which would tend to collapse the crate or coop.

In the center of the top section 10 is arranged a door 38 of the usual construction for permitting the placing and removal of poultry, or the like, to and from the coop or crate. The door 38 is constructed of a pair of side bars 39 between which are 45 staves or rounds 40, said bars each having an opening in one end through which one of the staves 16 of the top section extends, for the door to slide thereon between the intermediate bars of the top. A coil spring is 50 interposed between one of the side bars of the door and adjoining the intermediate bar of the top, on the stave which slidably supports said door, for normally holding the door in engagement with one of the intermediate bars 15, for which purpose one of the staves 40 at the free end of the door extends slightly beyond bar 39 and is adapted to engage in a small opening in the adjoining intermediate bar of the top in order to 60 hold the door against swinging movement. In order to open the door it is slid against tension of the spring to release engagement of the projecting rung and may then be 65 swung upwardly, and it will be noted that

the ends of the bars 39 of the door project over one of the staves 16 of the top of the coop for preventing the door from swinging downwardly below the plane of said top.

When it is desired to knock down the coop or crate the nuts 33 on the lower ends of the bolts 31 are removed and the bolts are slid upwardly out of the openings 29 and 30 in the various sections. When the bolts 31 are removed and the sections disconnected the side sections 11 and 12 are laid side by side on the bottom section 13 between the cleats 23, the end sections placed on said side sections with their ends overlapping the cleats of the bottom near the ends thereof, and the top section 10 is then placed upon the end sections. Small wires or other securing means are then passed through the openings in the top and bottom sections so that said top and bottom sections will clamp between the same the end and side sections. It can be seen that the coop or crate is thereby materially decreased in size so as to take up a minimum amount of space during storing, shipping, or returning of empty coops or crates. When the coop or crate is knocked down it takes up less than one-third the space it occupies when set up, and when knocked down and the sections stacked there is less danger of the coop or crate being broken during shipping and permits of it being mailed by parcel post which is a very important item. The coop or crate is constructed in such a manner that it is practically impossible to set the same up or put the sections together incorrectly. A coop of this character will also be found very useful and practical by mail order houses and other dealers on account of convenience in storing as well as in shipping the same to purchasers.

As the ends of the bars of the various sections are joined together when the parts of the coop are assembled it can be seen that the four bolts 31 which form the connection of the parts not only draw them tightly together but also serve as braces to provide a strong and durable coop. Also it is to be noted that the bottom or floor section 13 is of such construction that the cleats 23 to which the bottom boards are attached are the elements which form the means for attaching the bottom to the other sections of the coop, and there being no cleats on the ends of said bottom section it permits the side pieces to be laid on the bottom boards side by side between said cleats for compact arrangement in stacking the several sections for shipping, as hereinbefore described.

Obviously minor changes may be made in the construction of coop herein particularly shown and described as the preferred embodiment of my invention, and I therefore desire protection by patent within the spirit and scope of the claims.

Having thus described my invention, what I claim as new is:

1. A knockdown coop or crate comprising a bottom section having cleats on the upper side thereof to which the bottom boards are attached, said cleats being disposed at the opposite sides of the bottom, side and end sections each having upper and lower bars with interposed rounds, said side sections fitting side by side between the cleats when the coop is in knocked down condition, and a top section consisting of spaced apart longitudinal bars connected by rounds, the ends of the bars and cleats of the aforementioned sections being connected by interlocking joints at the corners of the coop when assembled and having bolt holes therethrough; together with bolts extending through said joints from the top to the bottom of the coop at the corners thereof for securing all the sections together and bracing the structure, the bolt holes at the ends of the top and bottom also providing for securing the parts together in knocked down condition.

2. A knockdown coop or crate comprising a bottom section having cleats on the upper side thereof to which the bottom boards are attached, opposite side sections each having upper and lower bars with interposed rounds and said bars being of the same length as the bottom of the coop, end sections having upper and lower bars with interposed rounds and the bars corresponding in length with the width of the coop to interlock with the ends of the side sections at the corners of the bottom section, the upper bars of said end sections having recesses therein at the inner sides thereof to receive engaging means on the top, and a top section consisting of side bars with the ends thereof forming a joint with the ends of the side and end sections and having intermediate bars connected to said side bars by rounds, said intermediate bars being reduced at their ends to engage in the recesses in the upper bars of the end sections when the coop is assembled; together with bolts extending through said joints from top to bottom of the coop at the corners thereof for securing all the sections together and bracing the structure.

3. A knockdown coop or crate comprising a bottom section having cleats on the upper sides thereof to which the bottom boards are attached, the corners of the bottom boards at the ends of the coop being cut away below the ends of the cleats, side and end sections each having upper and lower bars with interposed rounds, a top section consisting of

a plurality of spaced apart longitudinal bars connected by rounds, and a swinging door between longitudinal bars of the top to cover an opening in the coop, the ends of the bars and cleats of the aforementioned sections being joined by interlocking parts at the corners of the coop when assembled; together with bolts extending through said joints from top to bottom of the coop at the corners thereof for securing all the sections together and bracing the structure, the nuts on the bolts being located in the cut away corners of the bottom boards below the cleats.

4. A knockdown coop or crate comprising a bottom section having cleats on the upper side at opposite sides thereof only to which the bottom boards are attached; side and end sections each having upper and lower bars with interposed rounds, the bars of the side sections being of the same length as the cleats on the bottom section and the bars of the end sections being of the same width as the bottom section to form joints with the cleats, and a top section consisting of a plurality of longitudinal bars connected by rounds the side bars of which are of the same length as the cleats and bars of the side sections to form joints with the ends of said cleats and bars when the coop is assembled; together with bolts passing through the joined ends of the bars of the aforementioned sections at the corners of the coop for securing all the sections together and bracing the structure.

5. A knockdown coop or crate comprising a bottom section having cleats on the upper side at opposite sides thereof only to which the bottom boards are attached, side and end sections each having upper and lower bars with interposed rounds, the bars of the side sections being of the same length as the cleats of the bottom section and the bars of the end sections being of the same width as the bottom section to form interlocking joints with the cleats, a top section consisting of longitudinal bars at the sides thereof of the same length as the upper bars of the side sections to interlock with the aforementioned joints, and intermediate bars connected to the side bars by rounds and adapted to connect with the upper bars of the end sections to assist in stabilizing the structure when assembled; together with bolts extending through said joints from top to bottom of the coop at the corners thereof for securing all the sections together and bracing the structure.

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