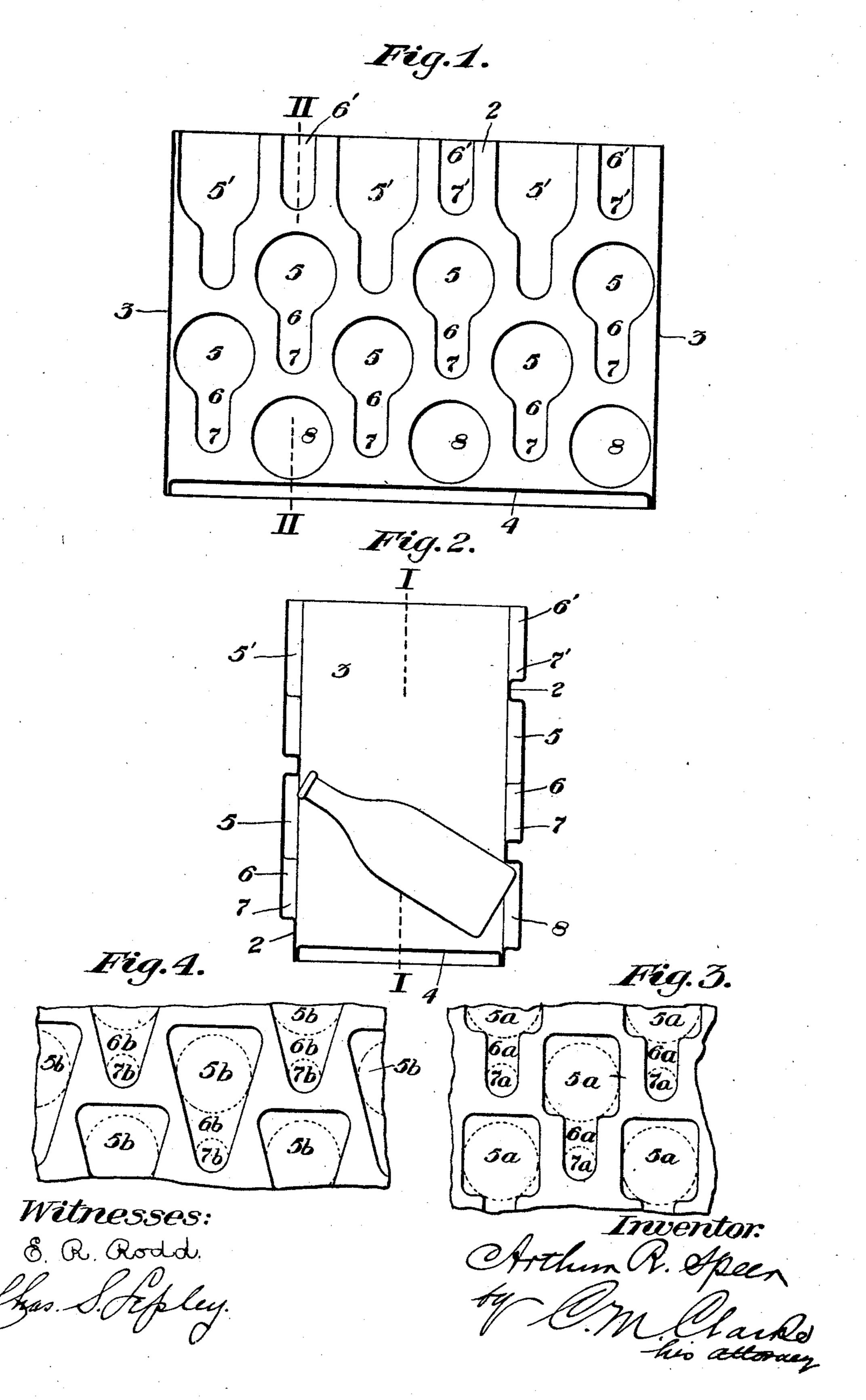
A. R. SPEER.

PACKING CASE.

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UNITED STATES PATENT OFFICE.

ARTHUR R. SPEER, OF PITTSBURG, PENNSYLVANIA.

PACKING-CASE.

No. 828,579.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARTHUR R. SPEER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of 5 Pennsylvania, have invented certain new and useful Improvements in Packing-Cases, of which the following is a specification, reference being had therein to the accompanying drawings, forming part of the specificato tion, in which—

Figure 1 is a longitudinal vertical section of my improved sheet-metal bottle-carrying case, indicated by the line I I of Fig. 2. Fig. 2 is a vertical section on the line II II of Fig. 15 1. Figs. 3 and 4 are detail views showing

portions of the inner face of the case similar. to Fig. 1 and illustrating modified arrange-

ments of the receiving-sockets.

My invention refers to packing-cases for 20 bottles, and has for its object to provide a case composed entirely of sheet metal adapted to receive the bottles and support them by the base and top in close proximity to each other, so as to economize space, permit of easy 25 insertion and removal of the bottles, and also to positively hold them in position against removal.

Referring to the drawings, 2 2 are the sides of the case, which are composed of sheet 30 metal, provided with similar continuouslyconnected ends 3 3 and a sheet-metal bottlebottom 4, with any suitable cover or top, The sides are provided with recessed basesockets 5 of a suitable form to receive the 35 base of the bottle, said sockets having narrowed vertical channel extensions 6, terminating in neck-supporting terminal sockets 7, adapted to receive the neck of the bottle of the next lower layer in reversed position—

40 i. e., end for end. In other words, these sockets are so located on opposite inner sides of the case with relation to each other that each base-socket is opposite each neck-socket, as shown in Fig. 2, while the bottles of one

45 layer are preferably reversed alternately, thus economizing space and equalizing the weight throughout the interior of the case. By this means the neck of each bottle may be lifted upwardly through the vertical chan-

50 nel 6, as indicated in Fig. 2, or inserted in position in the same manner by first seating the base in the socket 5. The lowermost basesockets are not necessarily provided with neck extensions and are merely in circular or 55 other suitable form, as indicated at 8, Fig. 1,

while the uppermost neck-sockets constitute merely narrow vertical channels 6', having the narrow neck-receiving terminal sockets 7', as shown in Fig. 1. The uppermost base-receiving sockets 5' may also extend vertically 60 of uniform width up to the top of the case, such construction somewhat facilitating the quick removal or insertion of the bottles.

In Fig. 3 I show a modified form of socket wherein the base-receiving portion 5ª is rec- 65 tangular in form, having the downwardlyextending neck-channel 6a, terminating in the neck-receiving socket 7^a, and this form is of advantage in that it somewhat strengthens and braces the walls of the case, while pro- 70 viding for the resting of the bottle merely against retaining surrounding points.

In Fig. 4 I show a further modified construction wherein the base-socket 5^b constitutes the upper portion of a rectangular 75 pressed-out receiving-cavity having a lower rounded-neck-receiving socket 7^b and an intervening downwardly-narrowing portion 6b, as clearly shown. An advantage of this construction is that it also strengthens the 80 sides of the case and provides sloping faces for the base-sockets, in which the bases of the bottles may be inserted, and will be securely held, due to the wedging action.

The advantages of my invention will be 85 readily understood and appreciated by all those accustomed to this class of packing or shipping devices. The bottles are very compactly packed and securely held therein, being independently and positively supported 90 at both ends, while avoiding the necessity of racks or interior holding elements or attachments of any kind. The cases may be made of any dimensions to suit the requirements of use, and the bottles may be nested upon 95 each other in close proximity, with a slight intervening space.

Having described my invention, what I claim is—

1. A bottle-case formed of sheet metal, roo the opposite sides of said case being provided with series of oppositely-disposed alternately-arranged base and neck supporting sockets, each base-socket being opposite a corresponding neck-socket, said sockets be- 105 ing formed by pressing the sheet metal outwardly beyond the inner faces of the sides and providing flat converging retaining edges at right angles to the sides adapted to make contact with the cylindrical exterior of the 110 9

bottle base and neck, the uppermost of said sockets being open to the top of the case, sub-

stantially as set forth.

2. A bottle-case provided with base-socktes formed in its oppositely-located side walls, said sockets being of triangular form with downwardly and inwardly tapering bottom - supporting edges terminating in a rounded - neck - supporting recess, substantially as set forth.

3. A bottle-case of sheet metal provided with base-sockets formed in its oppositely-located side walls, said sockets being of trian-

gular form with downwardly and inwardly tapering bottom-supporting edges terminat- 15 ing in a rounded-neck-supporting recess, said recesses being formed by pressing the metal beyond the inner faces of the sides, substantially as set forth.

In testimony whereof I affix my signature 20

in presence of two witnesses.

ARTHUR R. SPEER.

Witnesses:

CHAS. S. LEPLEY, C. M. CLARKE.