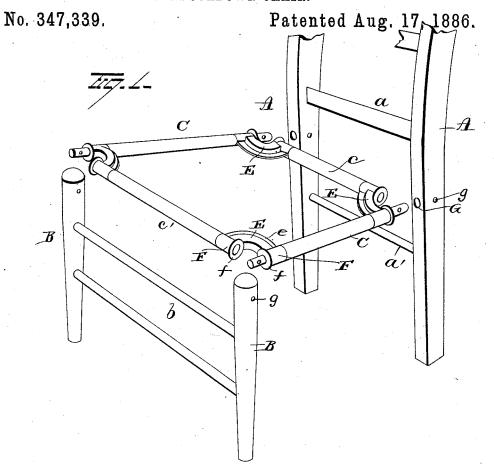
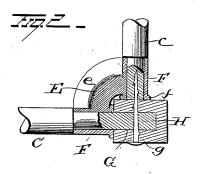
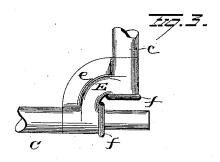
## J. R. FLANIGAN & W. E. HARRISON. KNOCKDOWN CHAIR.







G J. Nothing. & Y. Nothingham John R Flavingan WE Harrison. Attorney

## United States Patent Office.

JOHN R. FLANIGAN AND WILLIAM E. HARRISON, OF FORT MADISON, IOWA, ASSIGNORS TO THE FORT MADISON CHAIR COMPANY AND THE SAID JOHN R. FLANIGAN, BOTH OF SAME PLACE.

## KNOCKDOWN CHAIR.

SPECIFICATION forming part of Letters Patent No. 347,339, dated August 17, 1886.

Application filed March 19, 1886. Serial No. 195,835. (No model.)

To all whom it may concern:

Be it known that we, John R. Flanigan and William E. Harrison, of Fort Madison, in the county of Lee and State of Iowa, have invented certain new and useful Improvements in Knockdown Chairs; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an improvement in

knockdown chairs.

It has hitherto been customary to connect the ends of the side and back rounds of the seat15 frame by diagonal castings, and construct the ends of the side rods to enter the posts, thereby causing the entire weight applied to the seat to be taken by the side rounds. These have been liable to draw out and cause the chair to break down or stand in a loose unstable condition.

The object of our present invention is to provide a knockdown chair in which the cornerirons which connect the ends of the back and side rounds of the seat, or the front and side rounds, or both back and front and side rounds, shall have a light, strong, and neat shape, and which shall serve as stops to prevent the displacement of the woven or braided seat.

A further object is to provide means for securely attaching the seat to the posts, and causing the back and front rounds to bear their proportion of the weight applied on the seat.

A further object is to provide a knockdown 35 chair which may be packed in a small and compact form, and which can be set up for use by the unskilled masses.

With these ends in view our invention consists in certain features of construction and 40 combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents the parts of the chair separated from one another, but near their set-up adjustments. Fig. 2 is a detached sectional view of one of the corners, showing the fastening nail in its position in the post and rounds; and Fig. 3 is a detached view of one of the corner irons, showing more particularly its construction.

A represents one of the pair of back posts 50 connected by the back slats, a, and, if found desirable, by the low-down round a'.

B represents one of the pair of front posts, connected by one or more rounds or slats, b.

The seat-frame consists of the side rounds, C, 55

the back round, c, and the front round, c'.

E represents one of the central portions of one of the corner-irons. It is preferably a narrow strip of iron or other suitable metal set vertically edgewise, and provided with a web 60 or strengthening-rib, e, on its face toward the seat of the chair, thus rendering it **T**-shaped in cross-section. It may be straight or slightly curved, as found most desirable. At each end of the portion E e is formed a socket, F, in 65 which the side and back or front rounds, as the case may be, extend and snugly fit. The ends of the side rounds project through the sockets, while the ends of the back or front rounds stop flush with the end of the socket. 70 The adjacent ends of the sockets F are provided with flanges or ribs f, which form shoulders, against which the edges of the seat abut, and which serve to prevent the displacement of the woven or braided seat, particularly in 75 chair-seats which gradually narrow as they extend toward the back. The front sides of the back posts, A, are mortised to receive the ends of the side rounds which project through the sockets F, and when the said projecting 80 ends are in position within the mortises G the ends of the back round or of the front round will lie snugly in contact with the inside of the back or front posts. A hole, g, is made through the back or front posts, or both, and through 85 the projecting end or ends of the side rounds, through which a barbed wire nail, H, is adapted to be driven into the ends of the back or front round or rounds. The socket F, in which the end of the back round is inserted, serves 90 as a ferrule to prevent it from splitting when the nail is inserted. This construction forms a secure end support for the back and front rounds, and at the same time fastens the parts firmly together.

By constructing the front posts, front ends of the side rounds, and the front round in the same manner as the back, the ch ir may be shipped in a completely knocked-down condition, or so completely that the several parts—back, front, and seat—may be packed in flat layers, and yet when set up for use the chair will be equally as strong as what are commonly known as "set-up" chairs. The T shape of the corner-irons admits of a saving in metal and weight, while the strength is not impaired.

It is evident that slight changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of our invention; hence we do not wish to limit ourselves strictly to the construction herein set forth; but,

5 Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a corner iron adapted to unite the ends of a side and back

or front round of a chair-seat and form a fer-20 rule for the end of the back or front round, of a nail adapted to extend through the post, side rod, and into the ferruled end of the back or front round, substantially as set forth.

2. In a knockdown chair, the combination, 25 with legs, corner-irons, substantially as described, and the side and end rounds, of the nails passing through the leg and side rounds and entering the ends of the end rounds, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

JOHN R. FLANIGAN. WILLIAM E. HARRISON.

Witnesses:
PETER H. FRAILEY,
JOHN H. KINSLEY.