J. CRAIG.

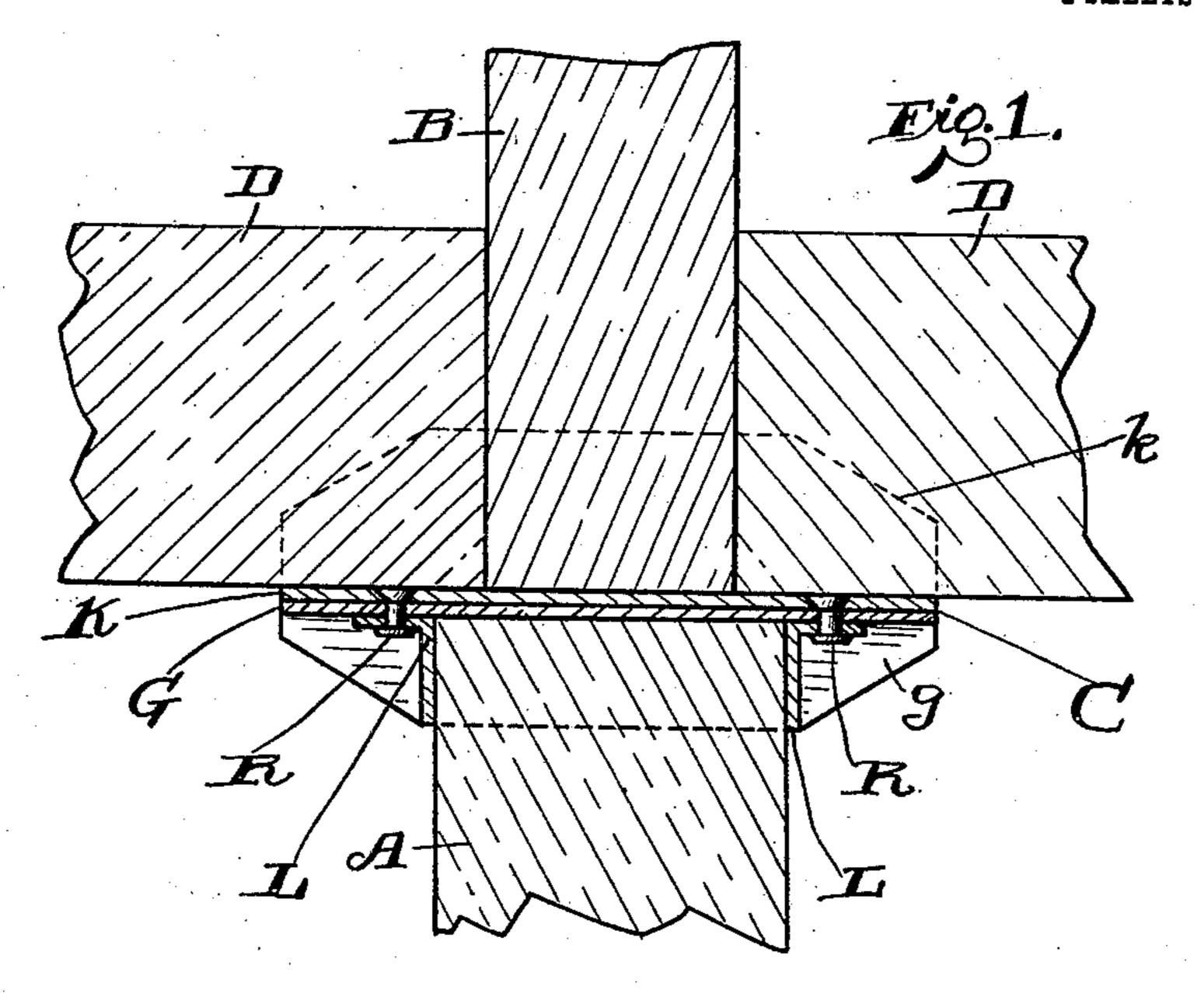
POST CAP.

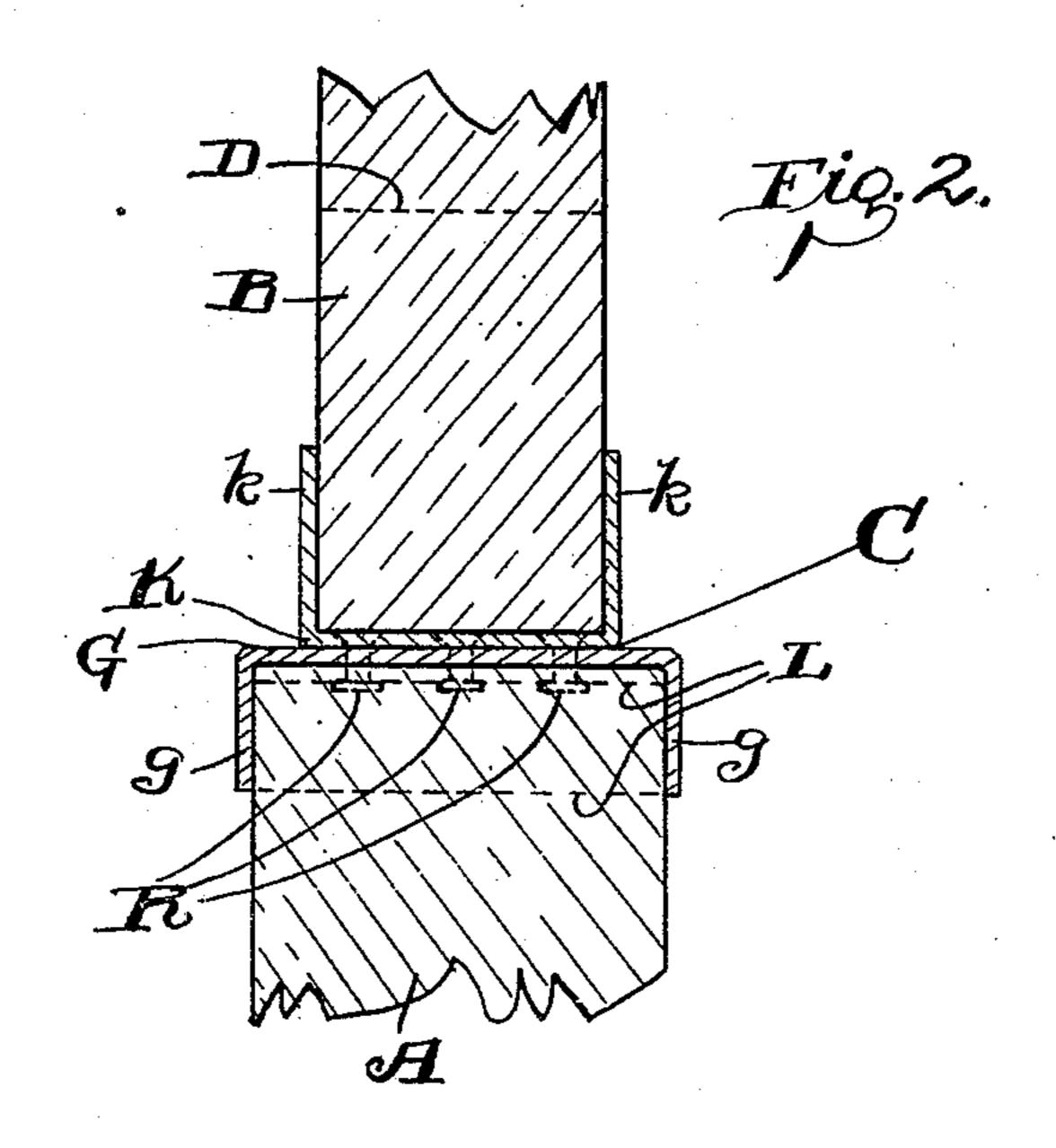
APPLICATION FILED APR. 3, 1905.

915,074.

Patented Mar. 16, 1909.

2 SHEETS-SHEET 1.





Haniel Haly. B.C. Brown.

James Craig

BY

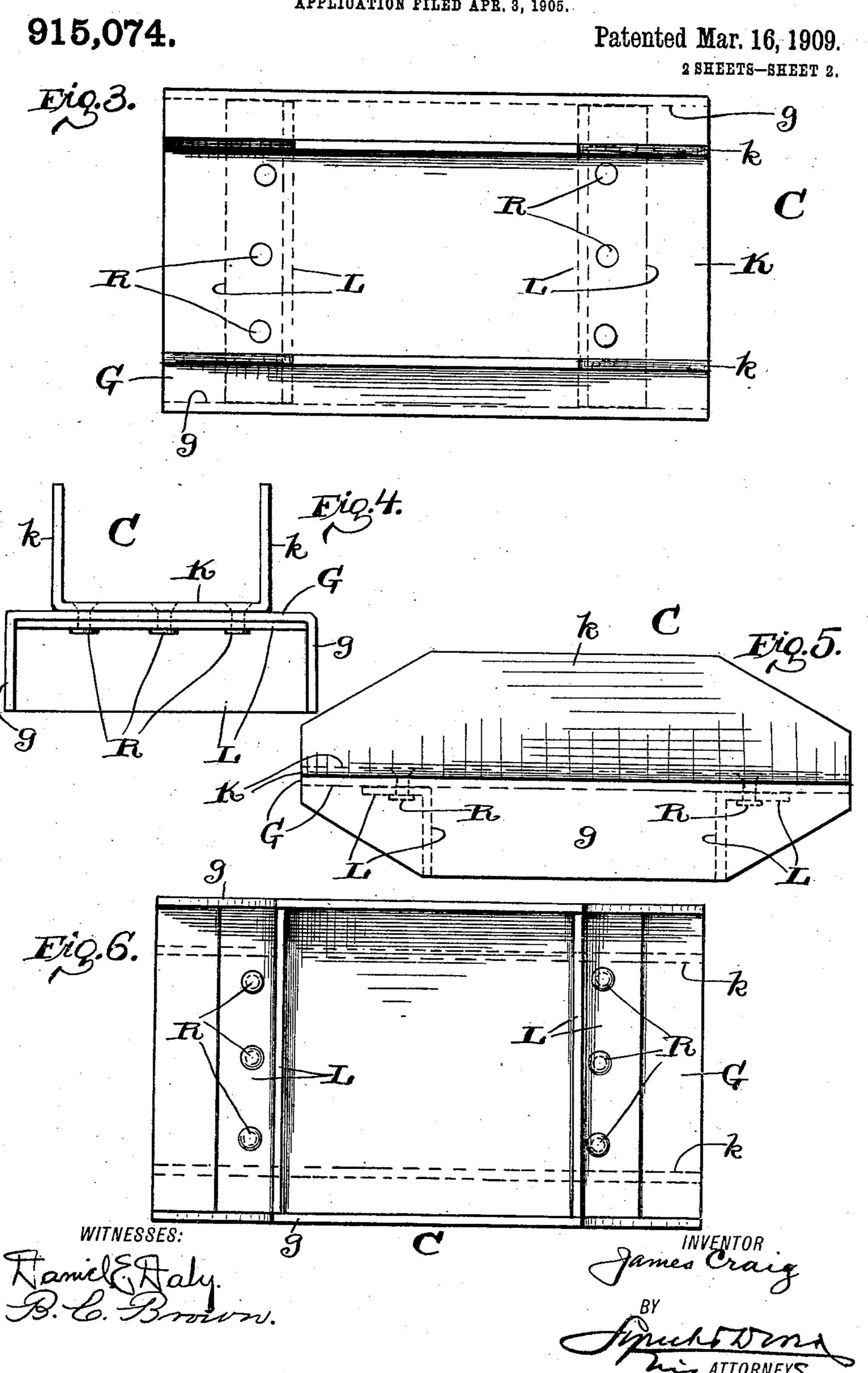
Figure Dans

ATTORNEYS

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POST CAP.

APPLICATION FILED APR. 3, 1905.



UNITED STATES PATENT OFFICE.

JAMES CRAIG, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL IRON AND WIRE COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

POST-CAP.

No. 915,074.

Specification of Letters Patent.

Patented March 16, 1909.

Application filed April 3, 1905. Serial No. 253,707.

To all whom it may concern:

Be it known that I, James Craig, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and 5 State of Ohio, have invented certain new and useful Improvements in Post-Caps; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art 10 to which it pertains to make and use the same.

This invention relates to improvements in metal post-caps suitable in supporting one or more joists or horizontally arranged beams or timbers from a post and in providing a metal layer between two superimposed posts.

The primary object of this invention is to provide a composite post-cap which is simple and inexpensive in construction, which possesses the requisite strength and durability, and whose component parts are conveniently and quickly assembled.

With this object in view and to the end of realizing other advantages hereinafter appearing, this invention consists in certain features of construction, and combinations of parts, hereinafter described and pointed out in the claims.

In the accompanying drawings, Figures 1 and 2 are two vertical sections taken at a right angle to each other and illustrate the application of a post-cap embodying my invention. Fig. 3 is a top plan of the post-cap detached. Fig. 4 is an end elevation of the post-cap. Fig. 5 is a side elevation of the post-cap. Fig. 6 is a bottom plan of the post-cap.

Referring to Figs. 1 and 2 of the drawings, A indicates a lower vertically arranged supporting post; B, an upper post arranged vertically above and in line with the lower post A, and C, my improved post-cap which forms a metal layer between the two posts A and B and is mounted upon the lower post.

Two joists or horizontally arranged beams D are supported from the post-cap at opposite sides respectively of the upper post B. The lower post A is shown thicker than the upper post B.

My improved post-cap is shown detached in Figs. 3, 4, 5 and 6, and comprises two superimposed horizontally arranged metal plates G and K. The lower plate G is adapted to rest upon the lower post A and is provided with two depending parallel flanges

g extending longitudinally and from end to end of the plate and adapted to abut against opposite sides respectively of the said post. The plate G is long enough to extend in under the horizontally arranged joists or beams 60 D which are to be supported from the lower post A. The plate G extends, therefore, upon the application of the post-cap as shown in Figs. 1 and 2, longitudinally of the said joists or beams a suitable distance, 65 with the two flanges g extending a suitable distance longitudinally of the joists or beams D and arranged at opposite sides respectively of the lower post A.

The upper plate K rests upon and extends 70 longitudinally of the lower plate G. The two plates G and K preferably correspond in length. The upper plate K extends therefore, upon the application of the post-cap as shown in Figs. 1 and 2, in under and longitudinally of the joists or beams D a suitable distance and is arranged also next in under the upper post B.

The upper plate K is provided with two upwardly projecting parallel flanges k extending longitudinally and from end to end of the said plate and arranged at opposite sides respectively of the upper post. The two flanges k extend a suitable distance longitudinally of the joists or beams D in 85 Figs. 1 and 2 and overlap opposite sides respectively of the said joists or beams. The flanges of the upper plate and the flanges of the lower plate are parallel.

The flanges of the lower plate G are braced apart by angle-plates L which extend between and are arranged at a right angle to the said flanges at opposite sides respectively of the lower post A. Each angle-plate L is arranged with one of its wings abutting 95 against the adjacent side of the lower post A and with its other wing abutting against the under side of the plate G. The last-mentioned wing of the angle-plate is riveted to the plates G and K, as at R. That is, suitably 100 applied rivets R secure the two plates G and K and the angle-plates L together.

It will be observed, therefore, that my improved construction comprises the following:—an upper flanged plate K arranged in a 105 horizontal plane and under and next the lower end of the upper post B and extending under and longitudinally of the joists or beams, said plate having two laterally spaced upwardly projecting flanges k extending 110

longitudinally and from end to end of the plate and overlapping opposite sides respectively of the joists or beams; a lower flanged plate G arranged next below and parallel 5 with the upper plate, said lower plate extending longitudinally of and affording bearing to the upper plate from end to end of the upper plate and having two laterally spaced downwardly projecting flanges g which ex-10 tend longitudinally and from end to end of the respective plate; two angle-plates L spaced longitudinally of and arranged next under the lower plate G and extending between and contiguous to the flanges g of the 15 lower plate, and rivets R extending through the two superimposed parallel plates G and K and through the angle-plates L and instrumental in securing the said plates G, K and L together. It will also be observed that the 20 said angle-plates have their downwardly projecting wings or members arranged to abut or bear laterally against the lower post A upon mounting the post-cap on the said post as shown in Fig. 1, so as to prevent displace-25 ment of the post-cap endwise of the plates G and K and consequently longitudinally of the joists or beams; that the said angle-plates have their other laterally projecting wings or members arranged next below the plate G 30 and secured to both plates G and K by the rivets R, and that the said angle-plates are instrumental in reinforcing opposite endportions respectively of the said plates G and It will also be observed that the post-35 cap hereinbefore described requires the assemblage of only two flanged plates G and K and two angle-plates. The component parts can be inexpensively carried in stock, and convenient selection made from the stock 40 to meet the dimensions or requirements of different sizes and shapes of post-caps. The two flanged plates G and K correspond in length in all sizes and shapes of post-caps, so that the lower plate G affords a bottom bear-45 ing to the upper plate K from end to end of the plates. If the upper post B were thicker widthwise of the post-cap than shown in Fig. 2, an upper plate K wider than illustrated in this figure would of course be employed in 50 lieu of the plate K shown. Similarly, if the lower post A were not as thick widthwise of the post-cap as illustrated in Fig. 2, a lower plate G narrower than the plate G illustrated would be used and shorter angle-plates L 55 employed. Also in my improved construction of post-cap the two flanged plates G and K and the angle-plates L are secured together by the same rivets R so as to keep the cost of construction down to a minimum. What I claim is:— 60

1. The combination, with two vertically arranged superimposed posts, and two joists or beams arranged horizontally and at a right angle to and at opposite sides respec-65 tively of the lower end of the upper post, of |

a composite metal post-cap instrumental in supporting the said joists or beams from the lower post and forming a metal layer between the two posts, said cap comprising the following:—an upper flanged plate arranged in 70 a horizontal plane and under the lower end of the upper post and extending under the adjacent ends of the joists or beams and having two laterally spaced upwardly projecting flanges extending longitudinally of the re- 75 spective plate at opposite sides respectively of and longitudinally of the adjacent ends of the joists or beams; a lower flanged plate mounted on the lower post and arranged under and parallel with and secured to the 80 upper plate and extending longitudinally of and affording bearing to the upper plate and having two downwardly projecting flanges which extend longitudinally of the respective plate and are arranged externally of the lower 85 post, and two angle-plates spaced longitudinally of and arranged under the lower plate and extending between the flanges of the lower plate and reinforcing opposite endportions respectively of and secured to the 90 superimposed parallel plates.

2. The combination, with two vertically arranged superimposed posts, and two joists or beams arranged horizontally and at a right angle to and at opposite sides respec- 95 tively of the lower end of the upper post, of a composite metal post-cap instrumental in supporting the said joists or beams from the lower post and forming a metal layer between the two posts, said cap comprising the fel- 100 lowing:—an upper flanged plate arranged in a horizontal plane and under the lower end of the upper post and extending under the adjacent ends of the joists or beams and having two laterally spaced upwardly projecting 105 flanges extending longitudinally of the respective plate at opposite sides respectively and longitudinally of the adjacent ends of the joists or beams; a lower flanged plate mounted on the lower post and arranged 110 under and parallel with and secured to the upper plate and extending longitudinally of and affording bearing to the upper plate and having two downwardly projecting flanges which extend longitudinally of the respec- 115 tive plate and are arranged externally of the lower post; two angle-plates spaced longitudinally of and arranged under the lower plate and extending between the flanges of the lower plate, said angle-plates being also so 120 arranged that one of the wings or members of each angle-plate projects downwardly next externally of the lower post and the other wing or member of each angle-plate projects laterally and outwardly and is secured to the 125 two superimposed plates.

3. The combination, with two vertically arranged superimposed posts, and two joists or beams arranged horizontally and at a right angle to and at opposite sides respec- 130

tively of the lower end of the upper post, of a composite metal post-cap instrumental in supporting the said joists or beams from the lower post and forming a metal layer between 5 the two posts, said cap comprising the following:—an upper flanged plate arranged in a horizontal plane and under the lower end of the upper post and extending under the adjacent ends of the joists or beams and having 10 two laterally spaced upwardly projecting flanges extending longitudinally of the respective plate at opposite sides respectively and longitudinally of the adjacent ends of the joists or beams; a lower flanged plate mount-15 ed on the lower post and arranged under and parallel with the upper plate and extending longitudinally of and affording bearing to the upper plate and having two downwardly projecting flanges which extend longitudinally 20 of the respective plate and are arranged externally of the lower post; two angle-plates spaced longitudinally of and arranged under the lower plate and extending between the flanges of the lower plate, said angle-plates 25 being also so arranged that one of the wings or members of each angle-plate projects downwardly and the other wing or member of each angle-plate projects laterally and outwardly, and rivets extending through the two 30 superimposed parallel plates and through the laterally projecting wings or members of the angle-plates and instrumental in securing all of the plates together, and the said angleplates having their downwardly projecting 35 wings or members arranged next externally of the lower post.

4. A metal pest-cap comprising two superimposed horizontally arranged plates, with the lower plate provided with two laterally 40 spaced depending parallel flanges, and with the upper plate provided with two laterally spaced upwardly projecting flanges parallel with the flanges of the lower plate; two angleplates spaced longitudinally of and arranged 45 at a right angle to the flanges of the lower plate, and the said angle-plates and the two first-mentioned superimposed plates being riveted together.

5. A composite post-cap comprising the 50 following:—an upper longitudinally and upwardly flanged plate adapted to be arranged in a horizontal plane; a lower longitudinally and downwardly flanged plate arranged under and parallel with and secured to the 55 upper plate, said lower plate affording bearing to the upper plate substantially from end to end of the upper plate, and two suitably applied angle-plates spaced longitudinally and arranged under the lower plate 60 and secured to the said superimposed parallel plates.

6. A composite post-cap comprising the following:—an upper flanged plate adapted to be arranged in a horizontal plane and 65 having two laterally spaced upwardly pro-

jecting flanges extending longitudinally and from end to end of the plate; a lower flanged plate arranged next below and secured to the upper plate, said lower plate extending longitudinally of and affording bearing to 70 the upper plate substantially from end to end of the upper plate and having two laterally spaced downwardly projecting flanges which extend longitudinally and from end to end of the respective plate; and two angle- 75 plates spaced longitudinally and arranged next under the lower plate and extending between and contiguous to the flanges of the lower plate and secured to the said superimposed parallel plates.

7. A composite post-cap comprising the following:—an upper flanged plate adapted to be arranged in a horizontal plane and having two laterally spaced upwardly projecting flanges extending longitudinally of the 85 plate; a lower flanged plate arranged next below and secured to the upper plate, said lower plate extending longitudinally of and affording bearing to the upper plate and having two laterally spaced downwardly pro- 90 jecting flanges which extend longitudinally of the respective plate; two angle-plates spaced longitudinally and arranged under the lower plate and extending between the flanges of the lower plate, and rivets extend- 95 ing through the aforesaid superimposed plates and through the angle-plates and instrumental in securing all of the plates together.

8. A composite metal post-cap comprising 100 the following:—an upper flanged plate adapted to be arranged in a horizontal plane and having two laterally spaced upwardly projecting flanges extending longitudinally of the plate; a lower flanged plate arranged un- 105 der and parallel with the upper plate and having two downwardly projecting flanges which extend longitudinally of the respective plate; two angle-plates spaced longitudinally of and arranged under the lower plate 110 and extending between the flanges of the lower plate, said angle-plates being also so arranged that one of the wings or members of each angle-plate projects downwardly and the other wing or member of each angle- 115 plate projects laterally and outwardly, and rivets extending through the two superimposed plates and through the laterally projecting wings or members of the angleplates and instrumental in securing all of 120 the plates together.

9. In a device of the class described, the combination with a lower inverted channeled member, of braces provided thereon for staying the supporting-floor, and an upper 125 channeled member extending parallel with said lower member and whose floor is substantially coincident with that of the lower member throughout their entire lengths; said parts being perforated by alined or 130

registering rivet-holes and secured together to form the complete structure, substan-

tially as set forth.

for accommodating timbers of varying sizes, the combination with a lower channeled member fitting the top of the supporting-post, the same being provided with braces or stays for its supporting-floor, and an upper channeled member of such size as to accommodate the supported timbers; said channeled members being superposed the one upon the other, with their floors affording a double thickness of metal substantially throughout their lengths, for sustaining the supported timbers, said floors having registering rivet-holes whereby the parts are securely fastened together, substantially as set forth.

11. In a timber seat and support, the combination with an inverted lower member having a supporting-floor and side walls, of an upper channeled member also provided with a supporting-floor and side walls, the supporting-floors being superposed the one 25 upon the other, to register with each other substantially throughout their entire lengths, fastening means for securing the upper and lower members together, and braces or stays provided upon the lower member for assistantially as set forth.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses.

JAMES CRAIG.

Witnesses:

Chas H. Dorer, B. C. Brown.