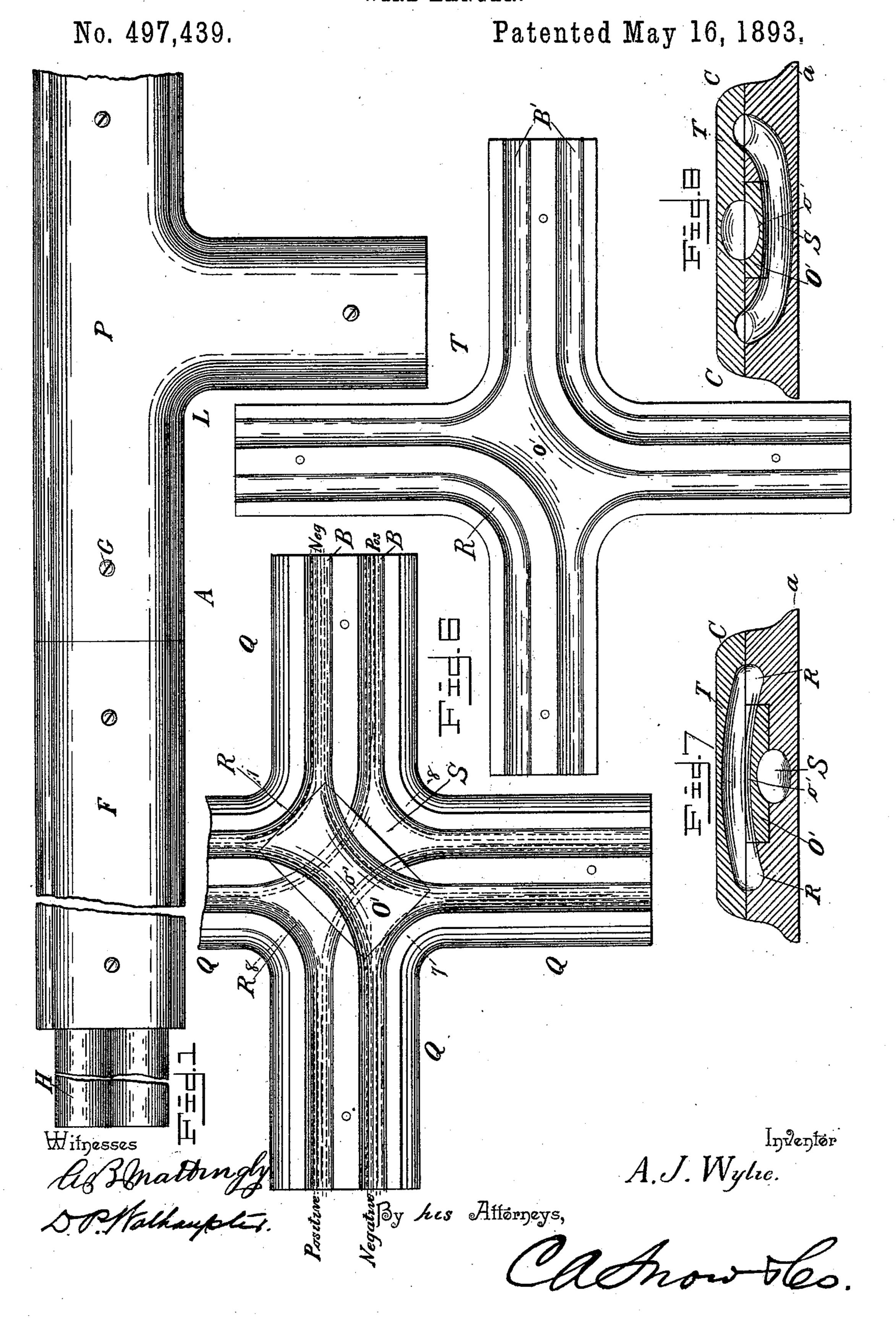
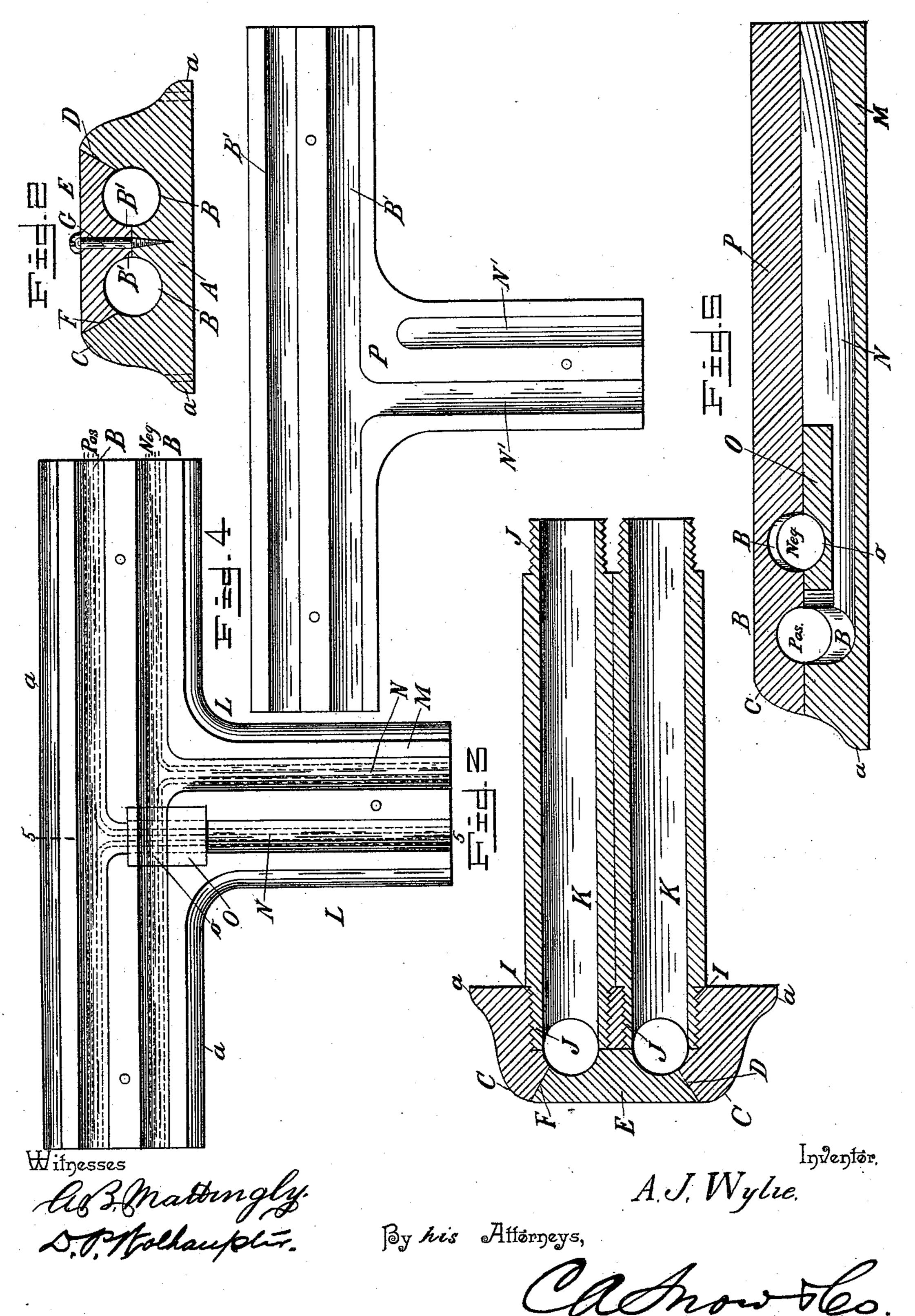
A. J. WYLIE. WIRE HANGER.



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No. 497,439.

Patented May 16, 1893.



## United States Patent Office.

ARTHUR J. WYLIE, OF ROME, NEW YORK.

## WIRE-HANGER.

SPECIFICATION forming part of Letters Patent No. 497,439, dated May 16, 1893.

Application filed October 14, 1892. Serial No. 448, 920. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR J. WYLIE, a citizen of the United States, residing at Rome, in the county of Oneida and State of New York, have invented a new and useful Wire or Cable Hanger, of which the following is a specification.

This invention relates to wire or cable hangers; and it has for its object to provide an improved construction of hanger particularly adapted for stringing and branching

electric wires or cables.

To this end the invention primarily contemplates certain improvements in devices of this character whereby lines of wire are entirely concealed from view within a nonconducting, fire-proof, insulated material, and to particularly construct an improved hanger which while presenting a neat appearance, at the same time affords the convenience of carrying wires long distances without cutting and with the least possible handling, and in case of imperfect insulation or burning out is a safeguard against fire. The hanger is adapted in its several modifications for house wiring.

With these and other objects in view which fall within the scope of the invention, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a plan view of a section of the wire or cable hanger including a single branch con-35 nection. Fig. 2 is an enlarged cross-section of the main line of hanger. Fig. 3 is a similar view taken through a point at which the tubular partition extensions are connected therewith. Fig. 4 is a detail plan view of a 40 single branch of the hanger with the face or cap plate removed. Fig. 5 is a detail sectional view on the line 5-5 of Fig. 4 with the face or cap plate in position. Fig. 6 is a view similar to Fig. 4 of the double branch of the hanger. 45 Figs. 7 and 8 are detail sectional views on the lines 7-7 and 8-8 of Fig. 6, respectively, with the face or cap plate in position.

Referring to the accompanying drawings:—
A represents an elongated block or bracket
made of non-conducting, fire-proof material,
and adapted to be arranged in a line to accommodate wires or cables, either in hanging

electric, bell or other wires. The block or bracket A, is provided with the opposite securing flanges a, by means of which the same 55 can be readily secured in position, and the same is further provided with the longitudinally disposed parallel separated wire-grooves B, inclosed at their outer sides by the rounded off-standing sides C, of the bracket, which oo sides are provided with the inner beveled edges D. After the brackets A, which are in suitable lengths, have been secured in position, to the wall ceiling or other point of attachment, it can be readily seen that in the case 6r of electric wiring the positive wires can all be run in one groove, while the other negative wires traverse the other groove. All the wiring is therefore done in plain sight, so that the wires can be carried long distances 70 without cutting and without much handling.

The wires running in the grooves B, of the block or bracket A, are entirely inclosed within said grooves and concealed from view by means of the flat removable face or cap plate 75 E. The said face or cap plate E, is provided with opposite beveled edges F, which meet and register with the inner beveled edges D, of the off-standing sides C, and said removable face or cap plate is further provided with 8c the parallel grooves B', which register with the corresponding grooves of the bracket, to form completely inclosed tubular wire chambers, extending through the entire line of hanger. The removable face or cap plates E, 85 are removably secured in position, inclosing the entire front face of the bracket by means of the securing screws G, passing through the same, intermediate of its grooves and into the block or bracket A, between its grooves, 90 and by tightening the screws the bevel joints. in the face of the hanger are made perfectly tight. By removing the face or cap plates the wires or cables are exposed to view for the purposes of examination and repairs.

At the end of the line of hangers, in order to pass the wires or cables through a wall or partition, I employ the end tubular partition extension H, which form continuations of the inclosed grooves or chambers, when the face 100 plate or cap is in position, and correspond in use and construction to that described and claimed in my former patent, No. 481,457.

In connection with wiring through walls or

partitions with the herein described hangers, in order to provide for passing the wires from the chambers of the hangers at an intermediate point, through partitions, I provide the 5 block or bracket at an intermediate point with the threaded openings I, which communicate with the respective chambers or grooves in the block or bracket, and are adapted to receive the threaded ends J, of the removable ro partition tubes K. The said partition tubes K, are preferably threaded at both ends so that the same can be readily adapted for being threaded into sections of the hanger on opposite sides of the partition as will be read-

15 ily apparent. It is necessary in wiring, to branch the wires in various directions, and to accomplish this, I modify the hanger so that the same can be readily adapted for this use. As illus-20 trated in Figs. 1 and 4, I employ a single branch L, for branching the wires in three different directions. The single branch L, is provided with a single branch arm M, which arm is provided with the branch grooves N, 25 which grooves communicate with the grooves B, in the body of the branch, which form continuations of the grooves in the main line of hanger. The branch grooves N, connect, each, with a different one of the grooves B, so that 30 the wiring of the positive wires in one groove or set of grooves, and the negative wires in another groove or set of grooves is still preserved, as fully illustrated in the dotted lines

in this figure, showing the direction the wires 35 may take. A bridge plate O, is seated in the branch L, and is provided with the groove o, forming a continuation of one of the grooves B, while the under portion of the bridge O, spans the branch groove N, leading to the 40 groove B, farthest from the branch arm, so as

to provide for the complete separation of the separate grooves, which accommodate the different lines of wire. A removable branch face or cap plate P, is adapted to removably 45 inclose the front of the branch plate, and is

provided with main grooves B', and branch grooves N', corresponding to and registering with the grooves in the hanger branch, and said plate is removably held in position by 50 means of the screws G, before referred to. The main line of hanger at certain points may leave to the double or four-armed branch

Q, which provides for leading the positive and negative wires in separate grooves, and 55 in four different directions as fully illustrated in the drawings. Each of the four arms of the double branch Q, is provided with parallel grooves B, forming continuations of the main line of hanger, and the inner corner

60 grooves R, which connect the inner terminals of the adjacent grooves B, so as to form a continuous line of grooves. A central grooved bridge plate O', is also seated in this double branch plate, and is provided with the upper

65 groove o', which diagonally connects two opposite corner grooves, while the under portion of the bridge spans the under connecting

groove S, which diagonally connects the other opposite corner groove. The different sets of grooves are also separated by the construction 70 just described to keep the positive and negative electric wires separated as illustrated. A four-arm removable face or cap plate T, incloses the front of the double branch plate Q, and is provided in its inner face with 75 grooves corresponding to the grooves in the hanger branch, similarly arranged, so as to entirely inclose all the grooves, and secure the same advantageous construction as in the other modifications of the hanger. Screws G, 80 also hold this removable face or cap plate in position.

Several modifications of the hanger herein described will readily suggest themselves to those skilled in the art, and the right to such 85 is reserved by me for those as fall within the scope of this invention. At this point it may be well to note that the construction of hanger herein described may be also advantageously adapted for hanging and swinging all 90 wires of any character, and in these adaptations particularly in connection with picture hanging, as picture moldings.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 95

ent, is— 1. In a wire or cable hanger, an elongated non-conducting, fire-proof, block or bracket having at its opposite edges securing flanges, longitudinally arranged parallel wire grooves, 100 and outer rounded off-standing sides partly inclosing said grooves and provided with inner beveled edges, flat removable face or cap plates having corresponding longitudinal parallel grooves registering with those in the 105 block or bracket, and opposite beveled edges adapted to snugly fit the inner beveled edges of said off-standing sides, and securing screws passing through said face or cap plates and the block or bracket intermediate of the sepa- 110 rated grooves, substantially as set forth.

2. In a wire or cable hanger, a block or bracket having separated wire grooves and threaded perforations at its rear side opening into each groove, a removable face or cap 115 plate inclosing said grooves, and separable partition tubes having threaded ends removably engaging said threaded perforations in the block or bracket, substantially as set forth.

3. In a wire or cable hanger, the combina- 120 tion with the main line of hangers; of the single branch bracket having a single branch arm, separated grooves aligning with those of the main line, and branch grooves in said branch arm communicating separately with 125 the main grooves, a grooved bridge plate spanning one of said branch grooves and aligning with one of the main grooves and a removable face or cap plate, substantially as set forth.

4. In a wire or cable hanger, the combination with the main line of hangers; of the double or four-armed branch bracket, having separated grooves aligning with those of the

main line, inner corner grooves connecting the inner terminals of the adjacent separated grooves, and an under connecting groove diagonally connecting two opposite corner grooves, a grooved bridge plate spanning said connecting groove and connecting the other opposite corner grooves, and a removable face or cap plate inclosing the front of said double branch, substantially as set forth.

In testimony that I claim the foregoing as 10 my own I have hereto affixed my signature in the presence of two witnesses.

ARTHUR J. WYLIE.

Witnesses:

CLARK W. DRAPER, J. S. BAKER.