

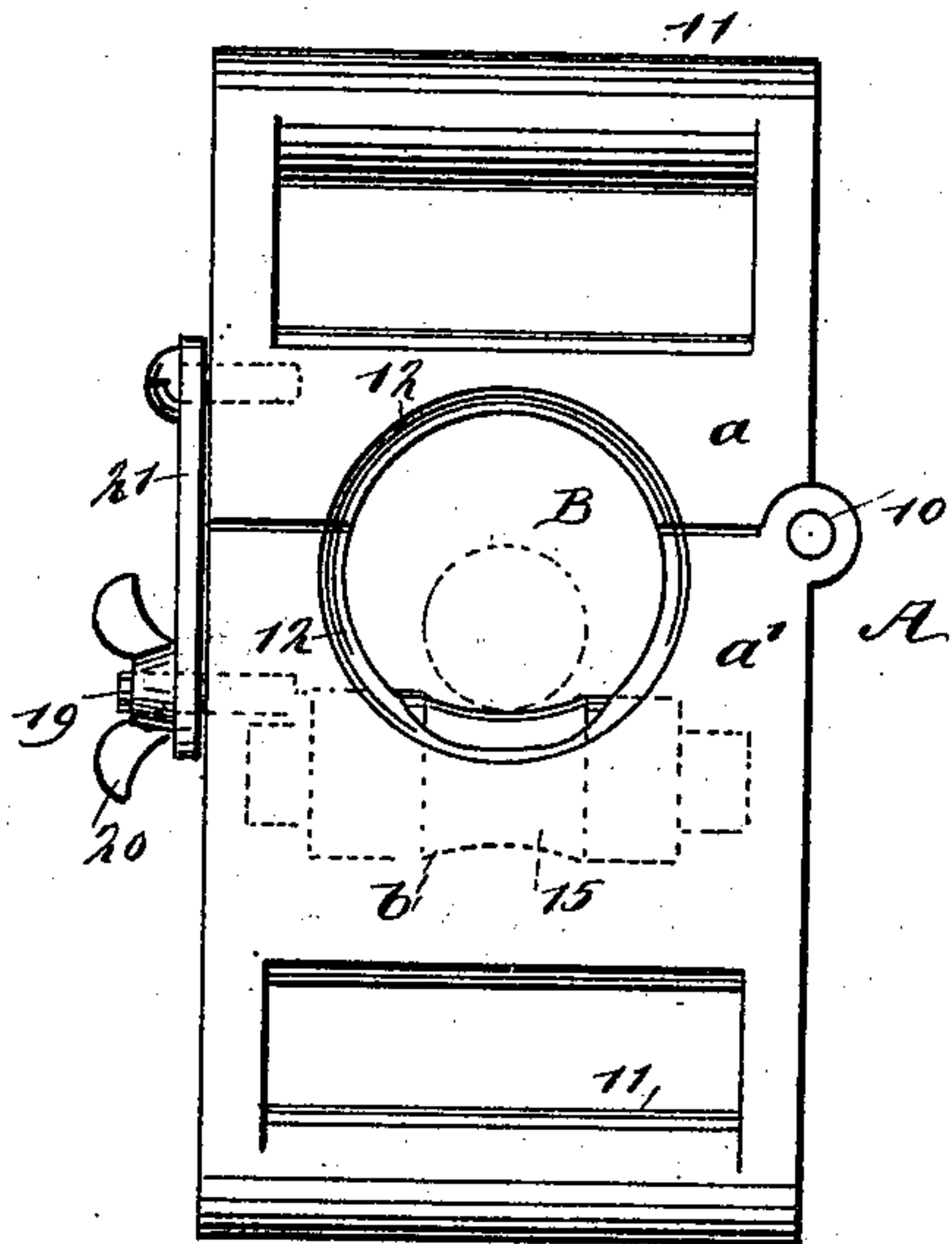
(No Model.)

U. H. ALEXANDER.  
GUIDE BLOCK FOR RUNNING WIRE.

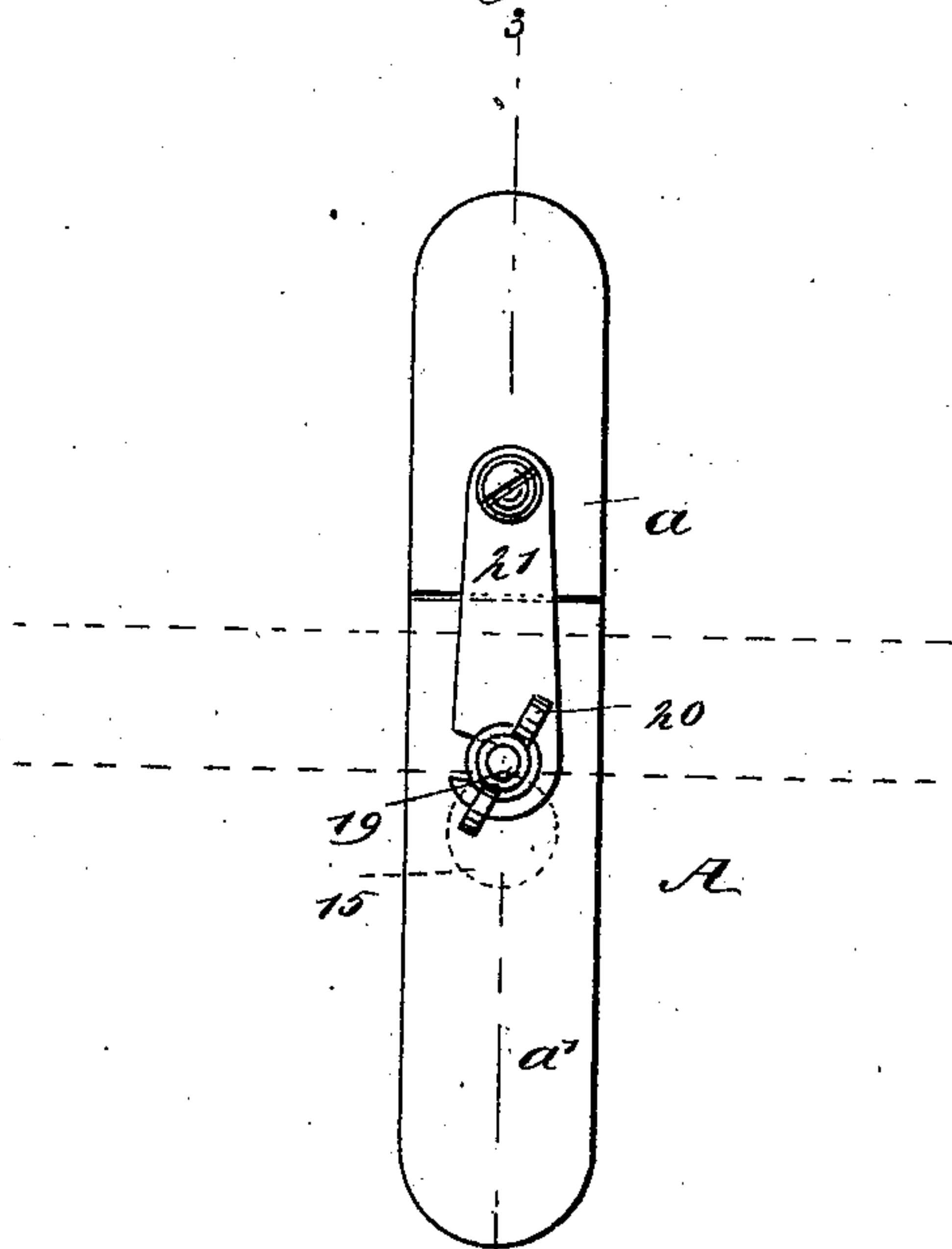
No. 504,190.

Patented Aug. 29, 1893.

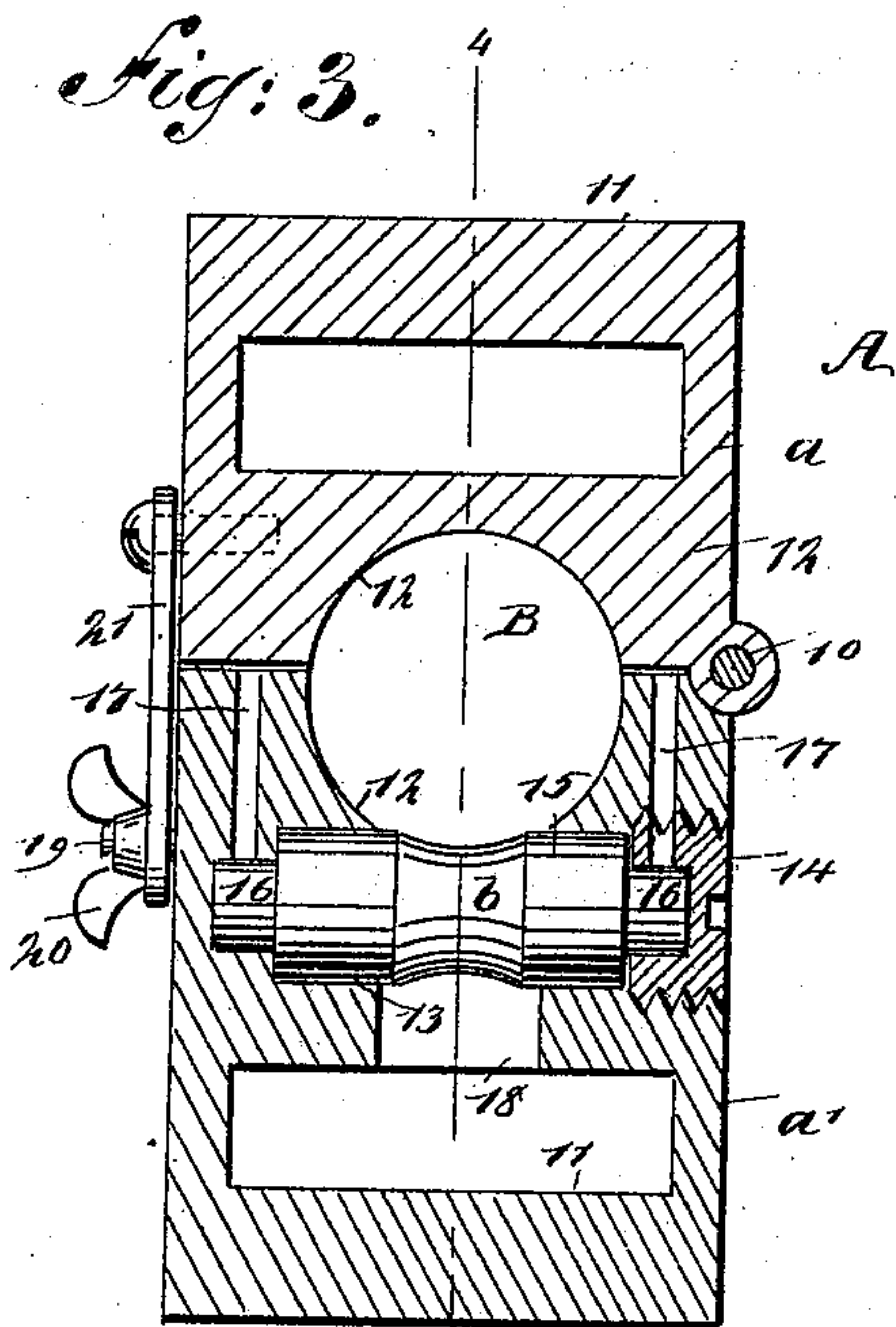
*Fig: 1.*



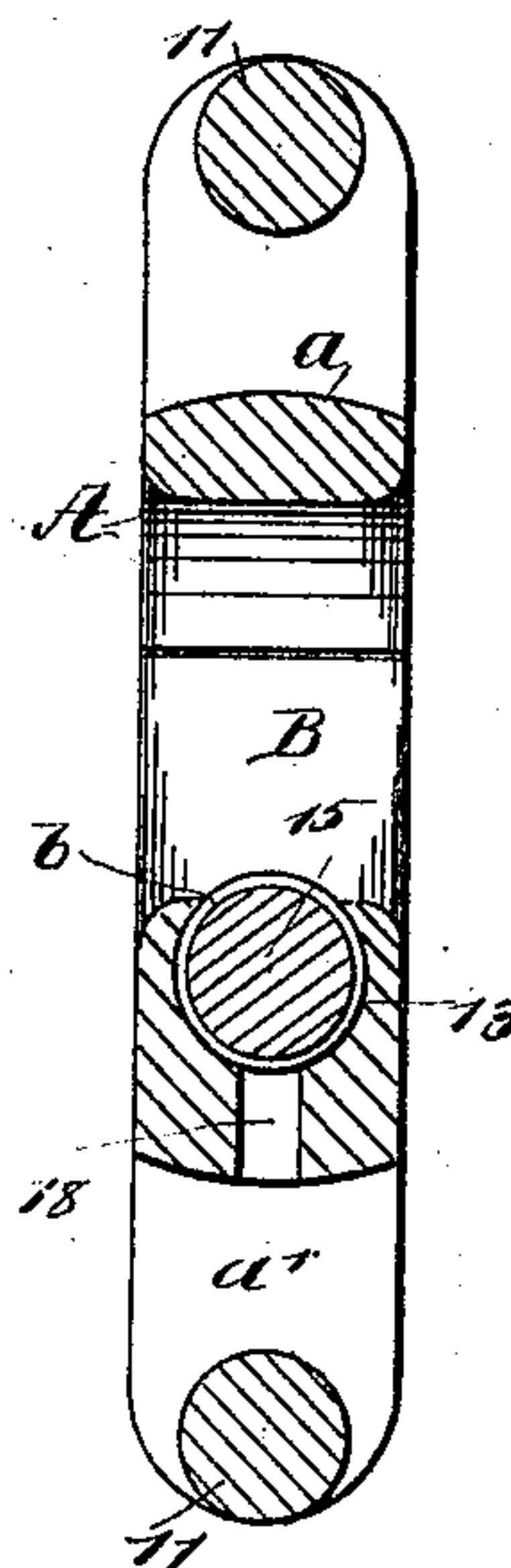
*Fig: 2.*



*Fig: 3.*



*Fig: 4.*



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# UNITED STATES PATENT OFFICE.

ULYSSES H. ALEXANDER, OF WILMINGTON, DELAWARE.

## GUIDE-BLOCK FOR RUNNING WIRE.

SPECIFICATION forming part of Letters Patent No. 504,190, dated August 29, 1893.

Application filed June 5, 1893. Serial No. 476,639. (No model.)

*To all whom it may concern:*

Be it known that I, ULYSSES H. ALEXANDER, of Wilmington, in the county of New Castle and State of Delaware, have invented a new and Improved Guide-Block for Running Wire, of which the following is a full, clear, and exact description.

My invention relates to an improvement in guides for wire, especially to a guide for wire while being run or stretched from pole to pole or equivalent support over a given length of territory, and the object of the invention is to provide a device which may be attached removably to a pole and which will serve as a guide for the wire running from that pole to the next, thus obviating the necessity of an attendant remaining upon the pole while new wires are being placed in position or old wires replaced, to guide and direct the wire.

A further object of the invention is to provide a device which may be expeditiously and conveniently connected with a pole, and through which the wire may be passed, the said device being capable of ready disconnection from the wire or from the pole, and further to provide a device wherein the wire will be guided and assisted in traveling from pole to pole even when the wire is drawn downward at more or less of an acute angle to the device.

A further object of the invention is to provide a guide device for running wire, which will be exceedingly simple, durable and economic and capable of ready manipulation.

The invention consists in the novel construction and combination of the several parts as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the device. Fig. 2 is a side elevation thereof. Fig. 3 is a central vertical section taken practically on the line 3—3 of Fig. 2; and Fig. 4 is a vertical section taken about centrally through the device, and practically on the line 4—4 of Fig. 3.

In carrying out the invention the device may be said to consist of a block A, which is

divided into two sections  $a$  and  $a'$ , and these two sections are connected by a hinge 10, or the equivalent thereof. The outer end of each section is provided with a bar 11, or the equivalent of a bar, and each section upon its inner face has produced in it a semi-circular recess 12, and when the sections are closed one upon the other these recesses are brought into registry and constitute a circular opening, as shown in Figs. 1 and 3, and through this opening the wire to be run or stretched is adapted to be passed. The lower wall of the central opening formed as above stated is cut away in order to communicate with a transverse opening 13, which is made in the lower section  $a'$ . This opening extends from one side of the block to within a predetermined distance of the other side, and the end of the opening which is carried through the block is normally closed by a screw plug 14, or like device. Within the opening 13 a roller 15, is journaled, and the trunnions 16 of the roller have bearing respectively in one end wall of the opening and in a suitable recess formed in the plug 14, as illustrated best in Fig. 3. The roller 15, therefore, is exposed at its central portion at the base wall of the central opening of the block formed by the registering recesses 12, and this opening I prefer to designate by the reference letter B. That portion of the roller 15 exposed at the central opening B of the block, is provided with a concavity at its center, designated in the drawings as  $b$ , in order that the wire passed through the opening B may be guided constantly to the central portion of the roller 15. It will be observed that when the plug 14 is removed the roller may be taken from the block, and if worn another roller may be introduced in its stead. The concaved surface  $b$  of the roller need not be so decided as illustrated in the drawings, in fact, in practice the concavity may be made quite slight; and I desire it to be understood that the roller 15, may extend to a greater or less degree within the opening B in the block than is shown in the drawings.

In order that the trunnions of the roller may be lubricated, oil ducts 17, are preferably formed in the upper surface of the lower block section  $a'$ , one of which ducts leads directly to one of the trunnions 16 of the



roller, while the other duct connects with a corresponding duct made in the plug 14, the latter duct communicating directly with the trunnion journaled in the plug.

5 In order to provide for the escape of rust, or other foreign matter that may be contained upon the wire drawn through the block and over the roller, an opening 18, is made in the section  $a'$  of the block, communicating  
10 with the interior of the chamber in which the roller revolves, the opening being produced in the section  $a'$  beneath the central portion of the roller, as shown in Figs. 3 and 4, and the exit opening 18 will empty whatever material is delivered to it over the lower bar 11.

15 The two sections of the block are locked together in any suitable or approved manner, preferably by locating upon one of the sections opposite the hinge 10 a threaded stud 19, adapted to receive a wing nut 20, or its equivalent, and pivoting upon the other section  $a$  a hook 21, adapted to receive the threaded stud 19 at a point between the outer wall of the section to which the stud is attached and the wing nut 20, as illustrated in  
20 Figs. 1, 2 and 3. It will be observed that in this manner the sections may be readily separated in order that the wire may be introduced into the central opening B or removed from the opening, and that the two sections may be locked together in an exceedingly simple, expeditious and convenient manner; but any equivalent of the locking device above described may be employed in its stead.

35 In the operation of the device, the block is adapted to be located for example between two cross arms of a telegraph or other similar pole; and when an attendant ascends a pole carrying an end of the wire to be renewed or to be run, the wire after the device  
40 is secured between two arms or to any one arm, is passed through the opening B to an engagement with the roller 15. It is not necessary to open one section from the other to pass the wire through it, and the device  
45 may be secured to one or to two arms or to any convenient support, by means of straps or their equivalents passed over the bars 11 and over the arms; or the straps may be secured in any approved manner to whatever support may be provided for the device. After the device has been attached to a pole or other support for the wire, the attendant may leave that particular support and pass to  
55 another to which a similar device is secured, and the wire passed through it. In this manner the wire may be passed from one pole to a reel located at any desired distance from the initial or starting point, and the presence  
60 of an attendant upon each pole or support is not necessary, since after the devices are secured in position and the wire is passed through

them it may be conveniently drawn from the starting point to the reel or other feed device, or vice versa, with expedition, without danger of catching and with little exertion on the part of the operators, since it will pass over the rollers and will be centered thereon, the rollers assisting materially in the running of the wire.

70 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A guide device for wire and the like, comprising a sectional body, each section being provided with a recess to form an opening when the sections are closed, for the passage of the wire, and with an opening in its outer end for the reception of a fastening strap or the like substantially as described. 75 80

2. A guide device for wire and the like comprising a sectional body, each section being provided with a semi-circular recess to form a circular opening for the passage of the wire, when the sections are closed, and with an opening in its outer end for the reception of a fastening strap or the like and a roller crossing the said opening, substantially as described. 85

3. In a device for guiding wire and like material, the combination, with a body portion divided into hinged sections, and a locking device connecting the sections, the said body portion being provided with an opening through which the wire is to be passed, of a roller located in a section of the body and extending across the opening, as and for the purpose specified. 90 95

4. In a device for guiding wire and like material, a block constructed in sections, the sections being provided with an opening through which the wire is passed, a locking device uniting the sections, and a roller removably located in one of the sections and crossing the opening through which the wire passes, and means, substantially as shown and described, for suspending the device, or attaching it to a predetermined object, as and for the purpose specified. 100 105

5. In a device for guiding wire and like material, the combination, with a block constructed in hinged sections, the sections being provided with registering recesses forming an opening through which the wire is passed, and a locking device uniting the sections, of a removable roller journaled in one of the sections and crossing the wire-receiving opening, and means, substantially as described, for connecting the sections to a predetermined support, as set forth. 110 115

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Witnesses:

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