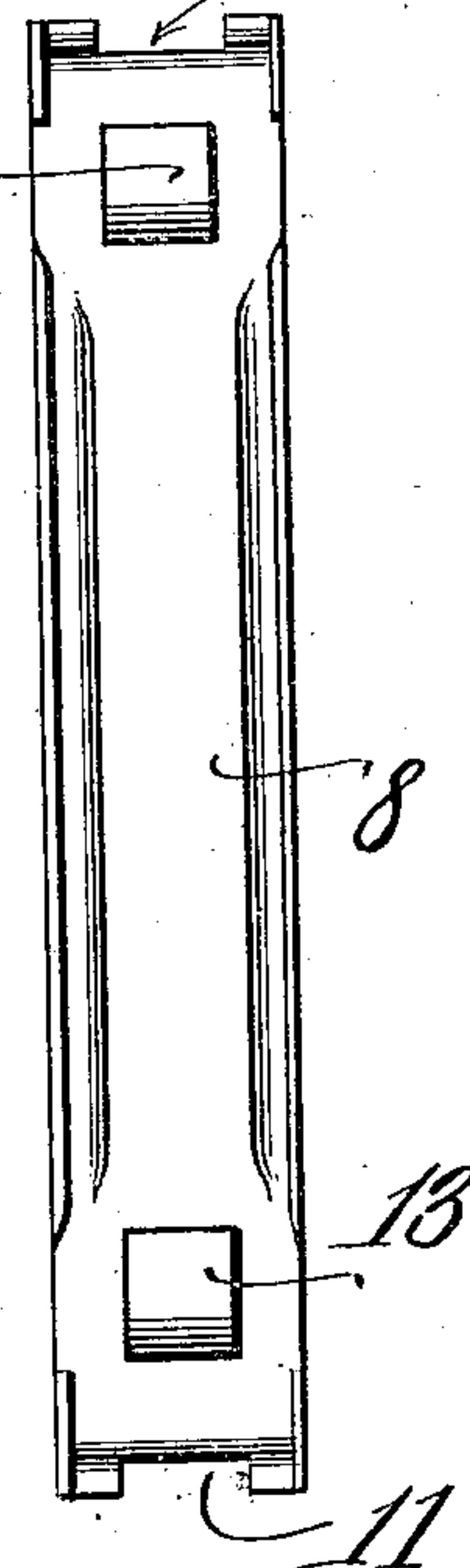
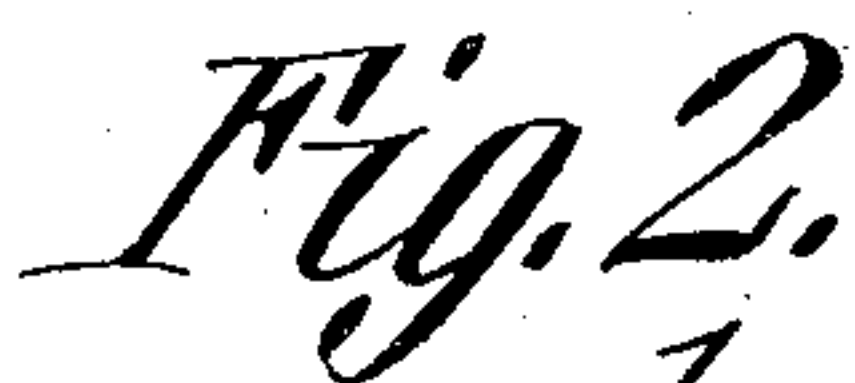
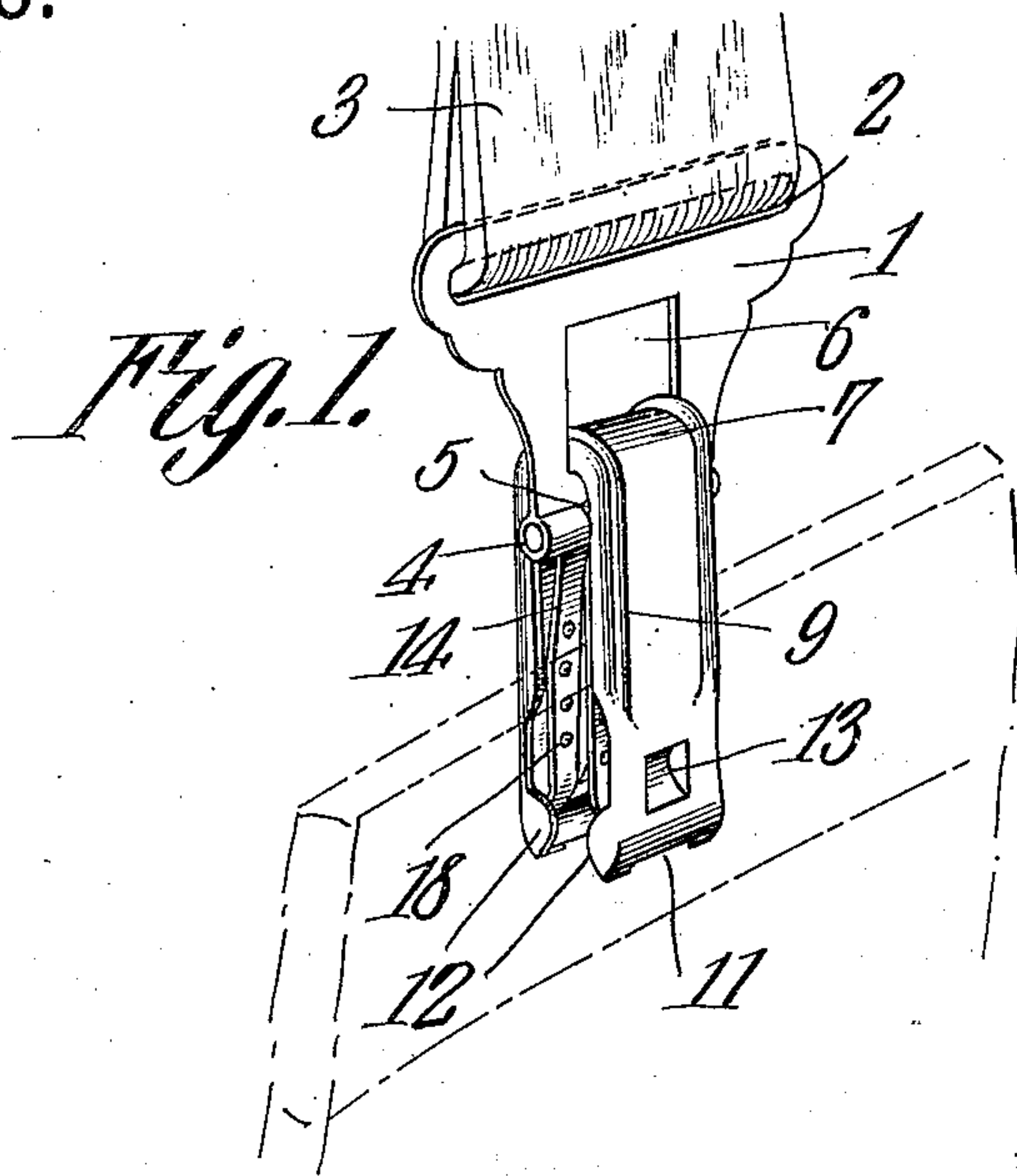


J. K. LIVINGSTON.
GARMENT FASTENER.
APPLICATION FILED DEC. 23, 1907.

Patented Nov. 10, 1908.

903,590.



Inventor

Jay K. Livingston.

By

C. Snow & Co.

Attorneys

Witnesses

E. H. H. H.
Herbert S. Lawson

UNITED STATES PATENT OFFICE.

JAY K. LIVINGSTON, OF CASEY, ILLINOIS.

GARMENT-FASTENER.

No. 903,590.

Specification of Letters Patent.

Patented Nov. 10, 1908.

Application filed December 23, 1907. Serial No. 407,708.

To all whom it may concern:

Be it known that I, JAY K. LIVINGSTON, a citizen of the United States, residing at Casey, in the county of Clark and State of Illinois, have invented a new and useful Garment-Fastener, of which the following is a specification.

This invention relates to garment fasteners and it is more particularly designed for use in connection with suspenders and other forms of garment supports.

The device is an improvement upon the suspender clasp described and claimed in an application filed by me on Aug. 1, 1907, Serial No. 386,666.

The object of the invention is to simplify and improve upon the construction of the device covered by the application before mentioned and to provide means whereby a firm grip may be obtained upon the garment inserted into the fastener, said grip being increased in proportion to the longitudinal movement of one member of the clasp.

Another object is to provide a clasp having garment engaging members which are normally disengaged from the garment but which are designed to shift into engagement therewith when the movable member is drawn in one direction.

A still further object is to provide a garment fastener which contains a garment engaging member designed, when released, to become automatically disengaged from the garment, there being means also provided for preventing the garment during its removal from tearing or becoming caught upon the clasp.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a perspective view of the device. Fig. 2 is a longitudinal section therethrough. Fig. 3 is a view similar to Fig. 2 and showing the inner member of the device shifted to release a garment. Fig. 4 is a detail view of the blank from which the movable member of the fastener is formed. Fig. 5 is a detail view of the blank from which the fixed member or housing is produced.

Referring to the figures by characters of

reference, 1 designates the housing of the device the same being constructed of sheet metal stamped to any desired shape and having an eye 2 for the reception of the strap 3 of a garment supporter while one end thereof is rolled as indicated at 4 to produce a bearing for the slidable member of the fastener there being a slot 5 within the hanger and close to the rolled portion as indicated at 5. An elongated opening 6 is formed within the hanger between the slot 5 and the eye 2 and extending through this opening is the intermediate or arched portion 7 of the movable member or housing 8. This member is substantially elliptical in end view and is provided with a longitudinal instruck portion 9 extending for the greater portion of the length of the member and terminating close to the ends thereof, this instruck portion constituting a reinforce to prevent the housing from bending.

The terminals of the housing are curved inwardly as indicated at 10 and provided with angular recesses or notches 11, there being projections or wings 12 at the side edges of the terminals and which extend upward from the inner faces of the terminals and constitute guides for the purpose hereinafter set forth. Struck inwardly from each side portion of the housing are deflecting lugs 13 between which is interposed the fixed member of the clasp. This member consists of an elongated U-shaped strip 14, the crown portion of which extends through the slot 5 and bears upon the rolled end 4 of hanger 1. The terminals of this member normally project through the recesses 11 as indicated in Fig. 3 and are oppositely bowed and converge toward their ends as indicated at 15 so that when the slidable member is pulled into the housing these bowed portions will fit snugly upon the inner curved faces of the terminals 10. This entire member is preferably formed of spring metal and has longitudinal tongues 16 formed integral therewith by cutting slits into the side portions of the member 14. Each of these tongues has one or more teeth 17 projecting from this inner face and the tongues are so formed as to normally bear against the inner walls of the recesses 11 and with their teeth 17 beyond the outer faces of the side portions of member 14.

When it is desired to place this fastener in engagement with a garment for the purpose of supporting said garment the edge portion

of the garment is inserted between the terminals of the member 14 and past the inwardly projecting teeth 17. When the garment is in this position it will also be disposed between the side portions of the housing 8. Housing 8 is then pushed downward upon the member 14 and the lugs 13 will press against the inclined tongues 16 and force them inwardly so that the teeth carried thereby will project into engagement with the fabric as indicated in Fig. 2. It will thus be seen that the garment will be securely held and it becomes impossible to disengage it from the clasp except by first pushing the housing 8 upward off of the tongues 16 so that they will be free to spring backward out of engagement with the fabric.

As clearly indicated in Figs. 4 and 5 the fixed and movable members are each formed of a single blank of metal which can be quickly shaped, and in addition to these two parts the entire device embodies the use of but one additional piece, to wit, the hanger 1. It will thus be seen therefore that the fastener is very simple in construction as well as durable and efficient, and can be manufactured at slight cost.

In order to further insure the engagement of member 14 with a garment, small projections 18 may be stamped therein in rows, as shown, these projections serving to cooperate with teeth 17.

What is claimed is:

1. In a clasp the combination with a fixed member having a resilient fabric engaging device carried thereby; of a member movably mounted upon the fixed member and bearing upon opposite faces thereof, there being means integral with the movable member for shifting the resilient device to engage an inserted fabric.

2. A clasp comprising a relatively fixed member having oppositely disposed resilient fabric engaging devices normally projected beyond the outer faces of said member, and a relatively movable member mounted upon the first mentioned member and disposed to slidably engage said devices to project them beyond the inner or adjoining faces of the fixed member.

3. A clasp comprising a relatively fixed member having oppositely disposed spring tongues and fabric engaging devices carried by the tongues, said tongues and devices being normally projected beyond the outer faces of the member, a member mounted to slide upon the relatively fixed member and having means for slidably engaging the tongues to project the fabric engaging devices beyond the adjoining faces of the fixed member.

4. A clasp comprising a relatively fixed member having oppositely disposed spring tongues and fabric engaging devices carried by the tongues, said tongues and devices be-

ing normally projected beyond the outer faces of the member, a member mounted to slide upon the relatively fixed member and having means for slidably engaging the tongues to project the fabric engaging devices beyond the adjoining faces of the fixed member, said slidable member having recessed terminals constituting guides.

5. The combination with a hanger having an elongated opening and a relatively fixed member supported thereby, said member having oppositely disposed spring fabric-engaging devices normally projecting beyond the outer faces of the member; of a slidable member guided within the opening in the hanger and having recessed terminals straddling and guided by the relatively fixed member, said slidable member being disposed to contact with and shift the fabric engaging devices into position beyond the inner or adjoining faces of the fixed member.

6. The combination with a hanger having an opening therein; of a relatively fixed member supported by the hanger and having oppositely bowed terminals, said member being provided with spring fabric-engaging tongues normally out of the path of an inserted fabric, and a member movably mounted within the opening in the hanger and extending longitudinally of the fixed member, said movable member having inwardly extended recessed terminals straddling and guided by the fixed member, said movable member being disposed to shift the tongues into engagement with the inserted fabric.

7. The combination with a hanger having an opening therein; of a relatively fixed member supported by the hanger and having oppositely bowed terminals, said member being provided with spring fabric engaging tongues normally out of the path of an inserted fabric, and a member movably mounted within the opening in the hanger and extending longitudinally of the fixed member, and means integral with the adjoining faces of the slidable member for bearing upon the tongues to shift them into engagement with an inserted fabric.

8. The combination with a hanger having an elongated opening, a rolled terminal and a slot adjacent the terminal; of a relatively fixed substantially U-shaped member mounted within the slot and bearing upon the rolled portion of the hanger, said member having integral oppositely disposed spring tongues, fabric engaging devices carried by the tongues and normally supported out of operative position, and a slidable member movably mounted within the elongated opening in the hanger and having its terminals guided by the fixed member, said slidable member being disposed to shift the tongues to project the fabric engaging devices into operative position.

9. The combination with a hanger having

a rolled terminal and an elongated opening; of a substantially U-shaped relatively fixed member extending through the hanger and bearing upon the rolled portion, said member having oppositely bowed terminals spaced apart, and spring tongues integral with opposite portions of the member and provided with fabric engaging devices, and a slidable member extending through the elongated opening and having its terminals engaging and guided by the fixed member, said slidable member being disposed to shift the tongues and their fabric engaging devices into engaging positions.

10. A device of the character described comprising a hanger having an elongated opening, a relatively fixed member supported by the hanger and having oppositely bowed

spaced terminal members, spring tongues integral with opposite portions of the member, each tongue having fabric engaging devices normally held out of engaging position, and a slidable member movably mounted within the opening in the hanger and having its terminals engaging and guided by the fixed member, said slidable member having inwardly directed portions for simultaneously engaging the tongues to shift them into engaging positions.

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

JAY K. LIVINGSTON.

Witnesses:

N. C. LIVINGSTON,

WM. A. ADAMS.