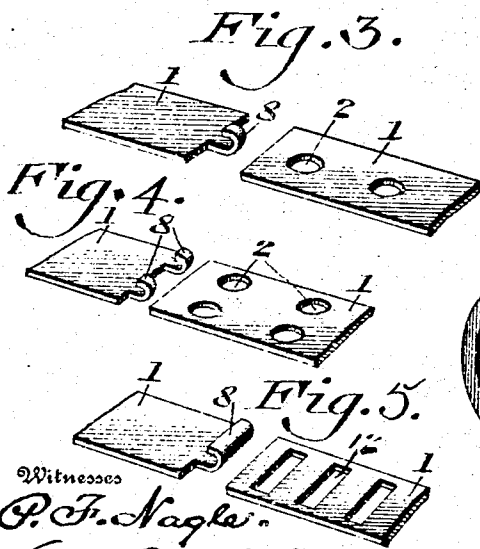
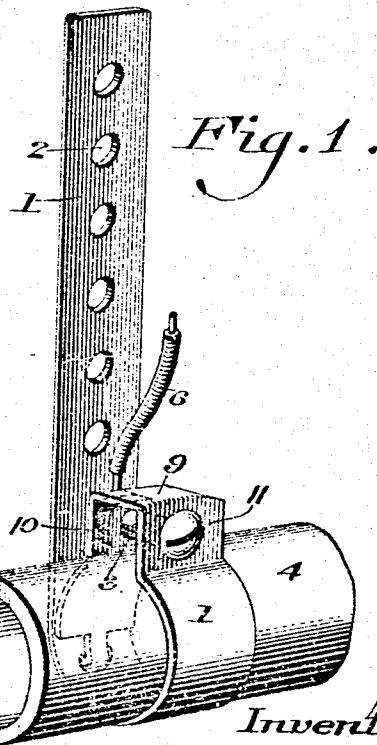
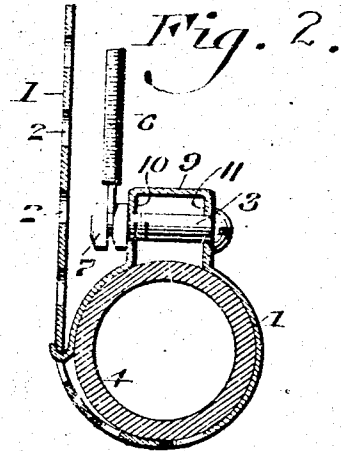


J. C. VOGEL.
GROUND JOINT CONNECTION.
APPLICATION FILED FEB. 6, 1909.

944,752.

Patented Dec. 28, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN C. VOGEL, OF PHILADELPHIA, PENNSYLVANIA.

GROUND-JOINT CONNECTION.

944,752.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN C. VOGEL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Ground-Joint Connection, of which the following is a specification.

My invention relates to a new and useful ground joint connection and consists of new and novel means for connecting the same to a pipe, rod or other suitable support or conductor.

It further consists in directly attaching a conducting wire with the flexible band of the device.

It further consists of other novel details of construction, all as will be hereinafter fully set forth.

Figure 1 represents a perspective view of a ground joint connection embodying my invention. Fig. 2 represents a sectional view thereof. Figs. 3, 4 and 5 represent perspective views of portions of the flexible band showing different means which may be employed for connecting the parts.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings: I have found in practice, in the ground joint connection for electrical conductors now in use, that, owing to the arrangement of tightening means, it is apt to injure the pipe or other support to which the connection is fastened, and it is also difficult to firmly connect the connection with the pipe or support.

My invention is designed to overcome these defects and to provide a new and novel connecting means and in the drawings I have shown constructions for carrying out my invention, but it will be evident that the arrangement of the parts may be varied and other instrumentalities may be employed which will come within the scope of my invention and I do not, therefore, desire to be limited in every instance to the exact forms as herein shown and described, but desire to make such changes as may be necessary.

1 designates a flexible band having a plurality of openings 2 therein, while the end of the band is provided with any suitable means for engagement with a suitable portion of the band in order that the same can be tightened around the support or conductor 4 when the bolt 3 is brought into operation.

In the present instance, I have shown a

hook 8 which is adapted to be seated in one of the openings 2 after the band has been passed around the support, as will be best understood from Figs. 1 and 2, in order that the end of the band will be connected with another suitable portion of the band. At a suitable point in the band 1, I form an offset 9, the walls 10 and 11 of which are preferably spaced apart and through said offset I pass the bolt 3, having the nuts 7 therein as previously and by the proper operation of the nuts 7, it will be understood that the walls 10 and 11 are drawn toward each other or compressed, so that the band 1 is tightened around the support or conductor 4 and firmly held in place, this being permitted by reason of the engagement of the hook 8 with the other suitable portion of the band 1. In this instance I may mount the conducting wire 8 between the nuts 7 where it will be firmly held in place. As shown in Figs. 3, 4 and 5, different means may be employed for the engagement of the end of the band 1 with a suitable portion thereof, for example, in Fig. 3 one hook 8 is shown, while in Fig. 4, two hooks 8 are shown entering corresponding openings in the band 1 while in Fig. 5 a single hook is adapted to enter elongated openings 12 in the band 1 which openings 12 correspond to the openings 2. From this it will be understood that I provide means for engagement of one end of the band with a suitable portion thereof and means for compressing the band for tightening the band around a suitable support.

If desired, I may in some instances employ a plate 13 which will normally abut the bent up portion of the band and against which the head of the bolt or screw 3 will contact in order to provide a better bearing therefor.

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

1. In a device of the character described, a flexible integral band, means adjacent one end of said band for engagement with a suitable portion thereof, and means for compressing said band for tightening the same around a suitable support or conductor.

2. In a device of the character described, a flexible band, means adjacent one end of said band for engagement with a suitable portion thereof, an offset formed in said band with the walls thereof spaced apart and means for drawing said walls together

for compressing said band around a suitable support or conductor.

3. In a device of the character described, a flexible band, means adjacent one end of said band for engagement with a suitable portion thereof, said band being bent to form an offset and a bolt passing through said offset for compressing the same for tightening said band around a support or conductor.

4. In a device of the character described, a flexible band, a hook on said band for engagement with a suitable portion thereof, an offset formed in said band and means

passing through said offset for compressing said band around a suitable support or conductor.

5. In a device of the character described, a flexible band having a plurality of openings therein, means on said band for engagement with one of said openings, an offset formed in said band, and means passing through said offset for compressing said band around a suitable support.

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