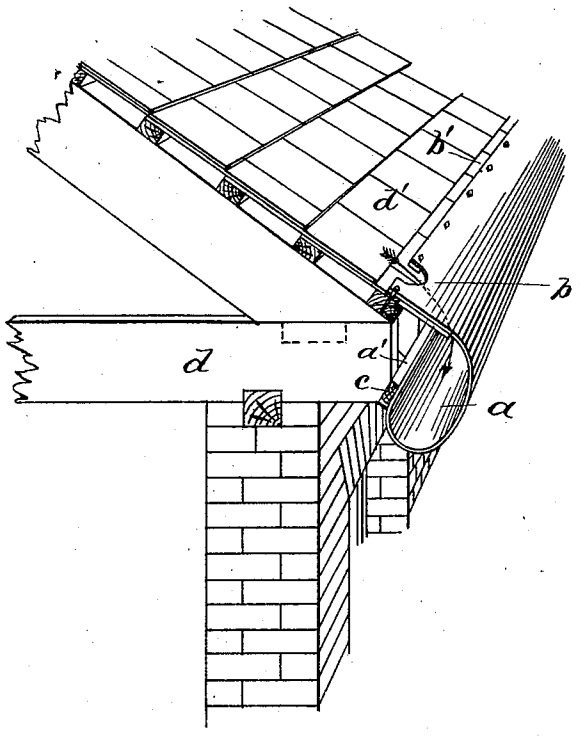
(No Model.)

J. PHELPS.

EAVES GUTTER FOR ROOFS.

No. 406,233. Patented July 2, 1889.



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UNITED STATES PATENT OFFICE.

JOHN PHELPS, OF DULWICH, COUNTY OF SURREY, ENGLAND.

EAVES-GUTTER FOR ROOFS.

SPECIFICATION forming part of Letters Patent No. 406,233, dated July 2, 1889.

Application filed January 22, 1889. Serial No. 297,212. (No model.) Patented in India July 16, 1888, No. 12.

To all whom it may concern:

Be it known that I, JOHN PHELPS, military tailor, residing at Mashobra, Croxted Road, Dulwich, in the county of Surrey, England, and carrying on business at Calcutta, Simla, and Lahore, India, have invented new and useful Improvements in Eaves-Gutters for Roofs, (for which I have obtained Letters Patent in British India, No. 12, bearing date July 16, 1888,) of which the following is a full, clear, and exact description.

My invention relates to the construction of the eaves-gutters for house and other roofs; and it has for its object to prevent the choking of the gutter by the accumulation of snow, leaves, or other rubbish therein.

It also has for its object to render the gutter lighter than the ordinary cast-iron gutters and stronger than ordinary zinc gutters, and to enable it to be fixed more readily and securely without the use of the supporting-brackets generally used.

Reference is to be had to the accompanying drawing, forming part of this specification, which represents in perspective the eaves-gutter of my invention as applied to the eaves of the roof of a house.

The invention consists, essentially, in constructing the gutter of a strip of sheet metal bent to such form as to constitute a gutter *a* and an inclined cover *b* therefor, this cover portion *b* being so inclined as to approximately form a continuation of the roof, provision being made for the drainage of rain-water from the roof underneath such sloping cover into the gutter.

The invention may be applied to slate, tile, or corrugated iron roofs, and in practice the one edge *a'* of the strip of sheet metal—that is to say, the inner edge of the gutter *a*—is nailed or otherwise secured to an eaves-bar *c*, fastened to the rafters *d* of the roof. The strip having been thus secured along one edge *a'*, is bent up to a half-round form to constitute the gutter proper *a*, and is then carried upward and backward, so as to overlap the upper surface of the roof *d'*, upon which the portion *b* of the strip is nailed or otherwise secured.

If the roof *d'* be of corrugated iron, the edge *b'* of the strip, which is plain, would be secured directly onto the top of the corrugations of the roof, the hollows of the corrugations affording space for the drainage of rain-water beneath the part *b* into the gutter *a*. In the case of a slated or tiled roof, small distance-pieces or a narrow strip of corrugated sheet metal would be introduced between the upper edge *b'* of the part *b* and the roof *d'*, in order to raise the former sufficiently to admit of such drainage. In either case the part *b* is so close to the roof as to offer no obstruction to the slipping off of masses of snow which may accumulate on the roof.

It will be obvious that the outer part of the gutter portion *a*, or that portion farthest from the wall of the building, is continuously supported along its whole length by the part *b* of the strip resting on the eave or projecting edge of the roof *d'*, and by the edge *b'* being fixed at frequent intervals to the roof, as above mentioned.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

A combined eaves-gutter and cover therefor, constructed of a sheet of metal bent to form both the gutter proper *a* and the sloping cover *b*, the gutter portion *a* being secured to the eaves along the edge *a'* and the cover portion *b* overlapping the roof and being secured thereon at its edge *b'* in a plane parallel with the surface of the roof, but at a sufficient distance above the roof to permit of drainage beneath the part *b* into the gutter *a*, substantially as specified.

The foregoing specification of my improvements in the eaves-gutters of roofs signed by me this 23d day of November, 1888.

JOHN PHELPS.

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