

(No Model.)

W. J. MUNRO, J. HART & D. BATEY.
SHINGLE BUNCH AND BINDER.

No. 513,813.

Patented Jan. 30, 1894.

Fig. 1.

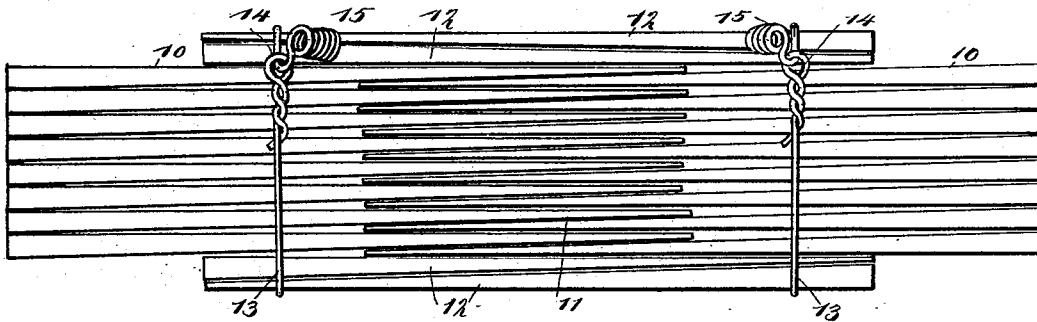


Fig. 2.

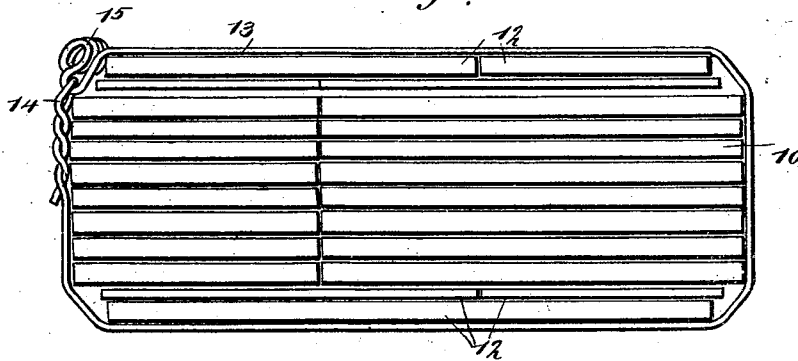


Fig. 3.

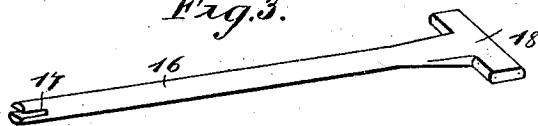
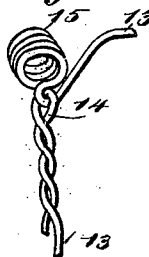


Fig. 4.



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SHINGLE BUNCH AND BINDER.

SPECIFICATION forming part of Letters Patent No. 513,813, dated January 30, 1894.

Application filed June 14, 1893. Serial No. 477,591. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM J. MUNRO, JOSEPH HART, and DAVID BATEY, all of Sedro, in the county of Skagit and State of Wash-
5 ington, have invented a new and Improved Shingle Bunch and Binder, of which the following is a full, clear, and exact description.

Our invention relates to improvements in bunching shingles. The shingles are usually
10 bunching in sections of countries which are remote from the market, and to lessen the cost of them it is customary to kiln dry the shingles and also to pack the bunches in as compact a shape as possible, to the end that
15 they may be as light as possible and occupy very little space.

The object of our invention is to produce a bunch of shingles, which occupies the least possible space consistent with the number of
20 shingles which it contains, and also to provide a binder which may be very easily attached to the bunch, and which, when attached, holds the shingles firmly together.

To these ends our invention consists of a
25 shingle bunch and binder, which will be hereinafter described and claimed.

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

Figure 1 is a side elevation of our improved bunch and the binders upon it. Fig. 2 is an end view of the same. Fig. 3 is a detail perspective view of the key used in fastening the binders to the bunch; and Fig. 4 is a detail perspective view of the fastened ends of
35 one of the binders.

The bunch is made up of shingles 10 which are packed in substantially the usual way,
40 with their points or thin ends overlapping, as shown at 11, sufficiently to make the bunch of a substantially uniform thickness throughout its length, and on the top and bottom of the bunch, near the center, are placed shingles 12, these being laid butts and points, as
45 shown in Fig. 1. The bunch is packed up and kiln dried, and after this it is held together by the binding wires 13, the wires being applied near the ends of the shingles 12,
50 and each wire or binder being formed, at

one end, into a loop 14, and in applying the wire the free end of the wire is run through the loop 14 which should be arranged at one corner of the binder and the free end of the wire is then twisted into a coil 15, which pre-
55 vents the wire from being withdrawn from the loop, and when the wire is twisted by a tool to be hereinafter described, the wire is drawn with sufficient power to compress the shingles and make a very tight bunch.

The twisting of a wire into a coil is effected
60 by a key 16, although other means may be employed if desired, and this key is simply an elongated bar having one end slotted, as shown at 17, to fit the wire, and the other end
65 formed into a handle 18. In using the key, the wire is inserted in the slot 17, the key turned by means of the handle 18 so as to twist the wire thereon, and the coil 15 is thus
70 fomed, after which the key may be withdrawn from the coil, the wire slipping from the slot 17, and the coil remains so as to prevent the binder or wire from getting loose. After the
75 coil is formed it is bent back bodily upon the wire 13, at a sharp angle to the loop 14, as shown in Fig. 4, thus forming a hook which prevents any possible slipping of the coil and wire.

It will be seen that the bunch constructed as described is of the smallest possible size
80 consistent with the number of shingles it contains, that the binders occupy scarcely any space, that they have the necessary strength, that they may be very easily applied, and that the complete bunch, including the bind-
85 ers, is much cheaper than the ordinary commercial bunch of shingles.

Having thus described our invention, we claim as new and desire to secure by Letters
90 Patent—

1. As an improved article of manufacture, a shingle bunch,—comprising a plurality of shingles arranged in substantially the usual way, with overlapping thin edges, a series of shingles laid butts and points on the center
95 and upper and lower sides of the bunch, and binders encircling the bunch near the ends of the outer layers of shingles, substantially as described.

2. A shingle bunch comprising a plurality 100

of shingles arranged in substantially the usual way with overlapping thin edges, a series of shingles laid butts and points on the center and upper and lower sides of the bunch, wire
5 binders encircling the bunch near the ends of the outer layers of shingles; said wires each having a loop at one end through which the other end is passed and a coil on the non-looped end projecting at an angle to the loop, substantially as set forth.

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Witnesses:

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