

UNITED STATES PATENT OFFICE.

JAMES L. ROGERS, OF EAST MARSHFIELD, MASSACHUSETTS.

IMPROVEMENT IN SHINGLING-BRACKETS.

Specification forming part of Letters Patent No. 213,349, dated March 18, 1879; application filed February 11, 1879.

To all whom it may concern:

Be it known that I, JAMES L. ROGERS, of East Marshfield, Plymouth county, Massachusetts, have invented Improvements in Carpenters' Brackets, of which the following is a specification:

My invention is a carpenter's bracket constructed as fully described hereinafter, so as to afford a firm and effective bearing upon the roof and permit easy adjustment, and capable of being reduced to a compact form for transportation, or stowage.

In the drawings forming part of this specification, Figure 1 is a side view showing one form of my improved bracket; Fig. 2, a cross-section on the line 1 2, Fig. 1, enlarged; Fig. 3, a perspective view, showing a modification.

The bracket consists, essentially, of two frames, A A', hinged together, supplemented, if necessary, by a number of leaves, *a' a'*. Each frame consists of a base-bar, *b*, an inclined standard, *c*, and brace *d*, all mortised or fitted rigidly together, as shown, the hinges *e* connecting the frames at the standards *c*.

At the under side of each frame A A' is a series of inclined spikes, *i*, as shown, which penetrate the shingles of the roof and prevent any backward movement, the extent of penetration increasing with the increase of weight applied to the bracket. The spikes are made square-pointed.

When but a single bracket is used, an increased bearing-face is secured by means of the leaves *a' a'*, which may be provided with hooks *m'*, for connecting them to eyes on the standard, as in Fig. 3; but I prefer the mode of connection shown in Figs. 1 and 2, in which each leaf *a'* has flanged plates *w*, arranged to receive the edge of a central bar, *a*, having upper and lower grooves *x* near the side edges to receive the flanges of the plates. The leaves may be applied and secured by moving them longitudinally on the bar *a*, to introduce or withdraw the flanges from the grooves *x*.

The bar *a* is pivoted at the lower end by a pin, *t*, to a plate, *u*, secured to one of the frames, and carries near the upper end a metal segment or tongue, *p*, extending between the standards *c*, and having holes adapted to a pin, *s*, which holds the bar and its leaves at any angle to which they are adjusted. Each leaf is provided with a pivoted brace or bar, either adapted to an eye, *s'*, on the adjacent brace *d*, Fig. 3, or with an eye adapted to pins *q* on the frames, as shown in Fig. 1, and a brace-hook, *t'*,

serves to hold the frames in position when spread apart, whereby a better and more stable support is secured.

It will be apparent that by means of eyes *o*, differently situated, or by the use of an extensible brace-hook, *t'*, the extent of the spread of the frames may be varied to increase or diminish the base, as circumstances may require.

To insure increased steadiness and hold the leaves firmly in position, each leaf *a'* may be provided with an inclined spike at its lower end, Fig. 3. When two or more brackets are used, the leaves may, if desired, be dispensed with, a board bearing on the standards near each end being used, and a hook, *t''*, may be arranged to hold the frames together when folded.

By the arrangement of a series of spikes at the lower side of each frame the latter can be carried down close to the eaves, still affording a firm hold, while the hinging of the frames together and use of detachable leaves permits the parts to be disconnected and packed closely together for stowage or transportation, as shown in dotted lines, Fig. 3.

It will be obvious that screws, racks, or other means may be employed for adjusting the bar *a* and its leaves.

I claim—

1. The combination, in a portable supporting-bracket, of the two frames A A', hinged together and constructed and provided with series of inclined spikes *i*, substantially as set forth.

2. The combination, with the hinged frames A A', provided with spikes *i*, of detachable leaves *a' a'*, as set forth.

3. The leaves *a' a'*, having flanged plates *w*, in combination with the bar *a*, its grooves *x*, and with hinged frames A A', as specified.

4. The frames A A', in combination with the bar *a*, pivoted to the frame near its lower end, and adjustable, as set forth.

5. The combination of the frames having pins *q* and adjustable leaves *a' a'*, having brace-bars *m*, with eyes adapted to said pins, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES L. ROGERS.

Witnesses:

L. S. RICHARDS,
M. G. RICHARDS.