

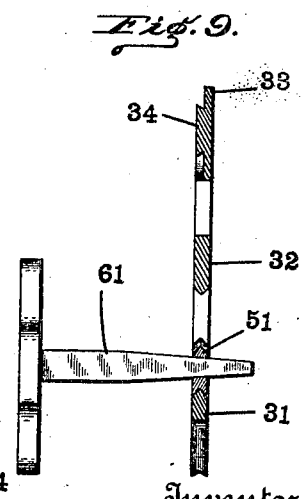
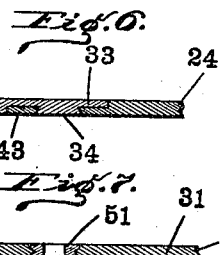
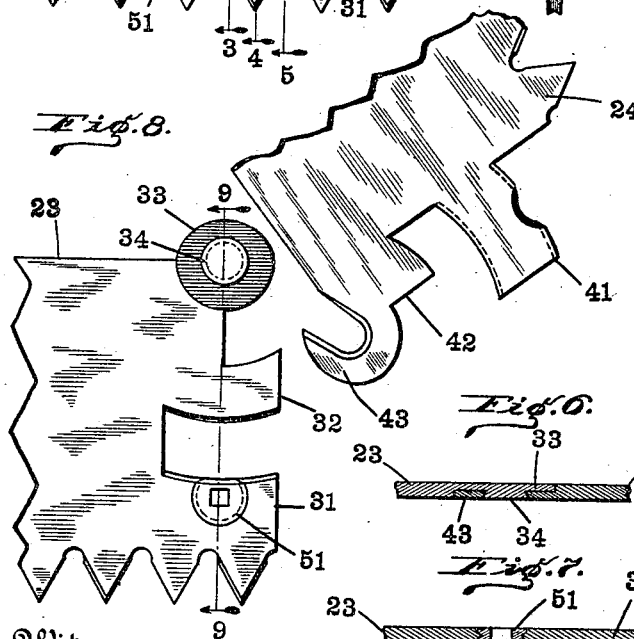
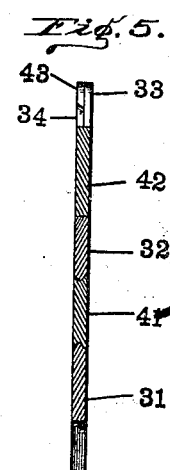
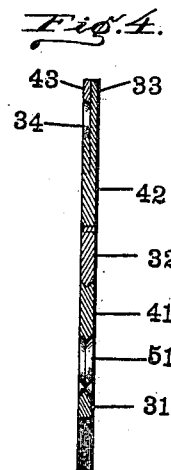
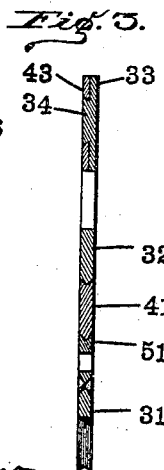
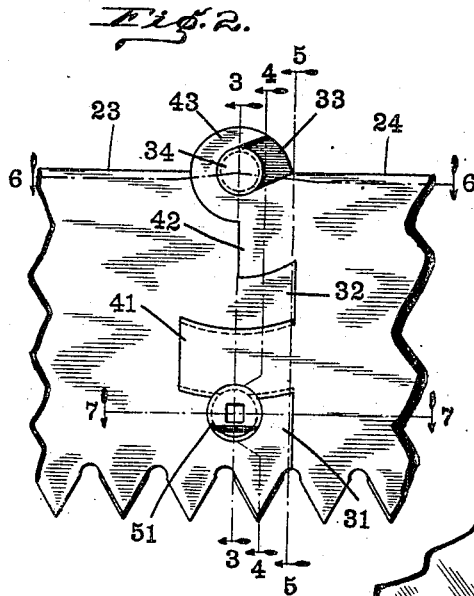
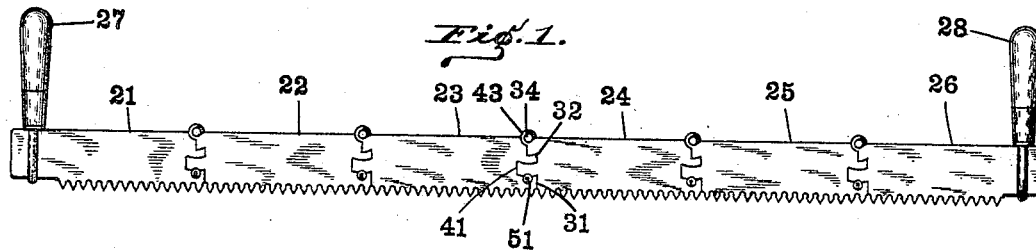
No. 837,439.

PATENTED DEC. 4, 1906.

T. L. WALLACE.

SAW.

APPLICATION FILED JUNE 24, 1905. RENEWED MAY 25, 1906.



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# UNITED STATES PATENT OFFICE.

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## SAW.

No. 837,439.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed June 24, 1905. Renewed May 25, 1906. Serial No. 318,743.

*To all whom it may concern:*

Be it known that I, THOMAS L. WALLACE, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Saws, of which the following is a specification.

As ordinarily constructed a long saw (as distinguished from a circular saw) consists mainly of a continuous blade formed from a single piece of metal. Such saw-blades are of considerable length. "Crosscut-saws," as they are generally known, have blades of from four feet to seven feet in length. A crosscut or other long-bladed saw is frequently highly desirable as a part of an outfit in which it is impracticable to pack a saw having a blade of the ordinary length. Hunters, trappers, campers, and small military parties (such as scouts, advance guards, and the like) have a special need for an equipment capable of being carried in the smallest possible space. As is well known, such equipment is usually in the form of packs or knapsacks and the like.

The object of my invention, therefore, is to produce a saw capable of being packed in small compass for transportation; and said invention consists in a saw the blade of which is formed in several sections, which sections are capable of being united, and thus brought into condition for use, and which are also capable of being easily disassembled and packed together in a small compact package suitable to be put in a knapsack or hunter's or soldier's pack.

The accompanying drawings illustrate a crosscut-saw embodying my said invention.

Figure 1 is a side elevation of such a saw; Fig. 2, a fragmentary side elevation, on an enlarged scale, showing the adjacent ends of two sections united together; Figs. 3, 4, and 5, transverse sectional views as seen when looking in the direction indicated by the arrows from the dotted lines 3 3, 4 4, and 5 5, respectively, in Fig. 2; Figs. 6 and 7, detail horizontal sectional views as seen when looking downwardly from the dotted lines 6 6 and 7 7, respectively, in Fig. 2; Fig. 8, a view showing the same parts as are shown in Fig. 2, but in their disassembled relation just before being united; and Fig. 9, a transverse sectional view as seen when looking in

the direction indicated by the arrows from the dotted line 9 9 in Fig. 8.

The saw-blade of my improved saw, as is best shown in Fig. 1, is composed of several short sections. Each section is provided with interlocking projecting portions (hereinafter called "fingers") at the ends. The saw shown is of the crosscut variety and is composed of six sections 21, 22, 23, 24, 25, and 26 and the usual two handles 27 and 28. The joints by means of which the several sections are united are all alike, and therefore in the following description I shall confine myself to a description of one of these joints and have selected the middle joint, which unites the two sections numbered 23 and 24. The section 23, as best shown in Figs. 2 and 8, has fingers 31, 32, and 33, the latter of which carries or embodies a stud 34. As shown in the cross-sectional views, certain of these figures are V-shaped or V-grooved at the edges, so that they may the better engage with the corresponding edges on the fingers of the adjacent section, which are formed to match therewith. The section 24 has two fingers 41 and 42. The finger 42 develops into a hook 43, which passes up around and engages with the stud 34 on the finger 33. At the point where these two fingers 33 and 42 overlap they are reduced, respectively, to half the aggregate thickness of the saw-blade. The stud 34 is preferably undercut somewhat or circumferentially grooved, and the edge of the hook 43 is correspondingly formed, and by means of this formation said two parts are more securely united, as will be readily understood.

When the parts are assembled, as best shown in Fig. 2, they are securely locked together by means of a rotary locking-plug 51, which is inserted in a circular opening formed in the adjacent edges of the fingers 31 and 41. In order to prevent this plug from easily dropping out and thus becoming lost, I prefer to make the greater portion of said circular opening in one of the fingers, and have shown the finger 31 as containing the greater portion of said opening. The plug 51 contains a V-groove around its edge, and the adjacent edges of the opening containing it are correspondingly V-shaped. One side of the plug 51 is cut away, and when it is turned into the position shown in Fig. 8 it offers no

obstruction to the entrance of the finger 41 into the space between the fingers 31 and 32. When, however, it is turned to the position shown in Fig. 2, it locks the fingers 31 and 41 firmly together and prevents the saw-sections bearing said fingers from coming apart.

When the sections of the saw are about to be assembled, they are first brought into substantially the relation indicated in Fig. 8. They are then brought together, so that the hook 43 is in engagement with the stud 34, after which the sections are swung around until they occupy the relation shown in Figs. 2 and 1. While being assembled the locking-plug 51 is positioned as shown in Fig. 8. After the parts are brought together said rotary plug is given a half-revolution by a suitable wrench or key, as 61, (see Fig. 9,) and this firmly locks the parts together and holds them in assembled relation in a saw-blade, as shown. The upper and lower edges of the several fingers are curved, the center from which the curves are struck being the center of the stud 34, and the parts in being assembled (after the hook 43 is engaged with the stud 34) swing about said center as an axis.

By means of my invention I have produced a saw composed of sections which are capable of being easily and quickly assembled and disassembled and which when disassembled are capable of being packed in small compass so as to be easily and conveniently transported from place to place.

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

1. As a new article of manufacture, a saw composed of a plurality of sections, said sections each having projecting fingers on their ends and the adjacent sections having recesses into which said fingers enter, and a fastening device whereby when the sections are assembled they may be locked together, said finger and recess connections being arranged successively in the line of cut of the saw.

2. In a saw, the combination of a plurality of sections having matching and interlocking projecting fingers on their ends, and a locking device for securing the sections together, said matching and interlocking projecting fingers being arranged successively in the line of cut of the saw.

3. In a saw, the combination of a plurality of sections having interlocking projecting fingers on their adjacent ends, one such adjacent end having a stud and the other a corresponding hook, and a locking device adapted to secure two adjacent projecting members together.

4. In a saw, the combination of a plurality of sections having interlocking projecting fingers, an opening formed in two adjacent projecting fingers, one on each section, a greater portion of said opening being in the

projecting finger on one section than in that on the other, a rotating locking device mounted in said opening and having one side flattened, said rotating locking device being thus adapted to lock the parts together when in one position and to permit them to be assembled and disassembled when in another position.

5. A saw composed of a plurality of sections, said sections being provided at their adjacent ends with a plurality of projecting fingers, one finger on one section embodying a hook, the fitting-surface of the several fingers on the respective sections being curved, the several curves being struck from a common center, and a suitable locking device intersecting the adjacent surfaces of two of the fingers.

6. In a saw, the combination of a plurality of sections having interlocking projecting fingers, one finger on one section having a stud and the corresponding finger on the other section having a hook adapted to engage therewith, the several fingers being curved, and the curves being struck from the center of the stud.

7. In a saw, the combination of a plurality of sections having interlocking projecting fingers, one finger on one section having a stud and the corresponding finger on the other section having a hook adapted to engage therewith, a circular opening formed in the adjacent edges of two of the fingers, a greater portion of said opening being in one finger than in the other, a rotatable locking device mounted in said opening having one side flattened, and means for rotating said locking device.

8. In a saw, the combination of a plurality of sections having interlocking fingers on their ends, one finger on one section having a stud, which stud is undercut to form an annular groove therearound, and the corresponding finger on the other section having a hook formed to fit into said groove and thus securely engage with said stud, said two fingers at the connecting-point being each substantially half the aggregate thickness of the saw.

9. As a new article of manufacture, a saw-blade composed solely of a plurality of sections to be connected successively end to end, said sections having interengaging portions lying in the same plane, and a movable key carried by one section for projection into an adjacent section.

10. As a new article of manufacture, a saw-blade composed solely of a plurality of sections to be connected successively end to end, said sections having interengaging portions lying in the same plane, and a movable key for connecting the two members.

11. As a new article of manufacture, a saw-blade composed solely of a plurality of sections to be connected successively end to end,

said sections having interengaging portions lying in the same plane and associable endwise and formed to prevent displacement transversely of the plane of the saw, and a movable key movably mounted in one section and projectable into the other section.

12. As a new article of manufacture, a saw-blade composed solely of a plurality of sections to be connected successively end to end, said sections having interengaging portions lying in the same plane and associable end-

wise and formed to prevent displacement transversely of the plane of the saw, and a movable key for connecting the two members.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 21st day of June, A. D. 1905.

THOMAS L. WALLACE. [L. s.]

Witnesses:

CHESTER BRADFORD,  
JAMES A. WALSH.