No. 859,295. PATENTED JULY 9, 1907.

T. HILL.

SHEET PILING.

APPLICATION FILED APR. 24, 1905.

Fig. 1

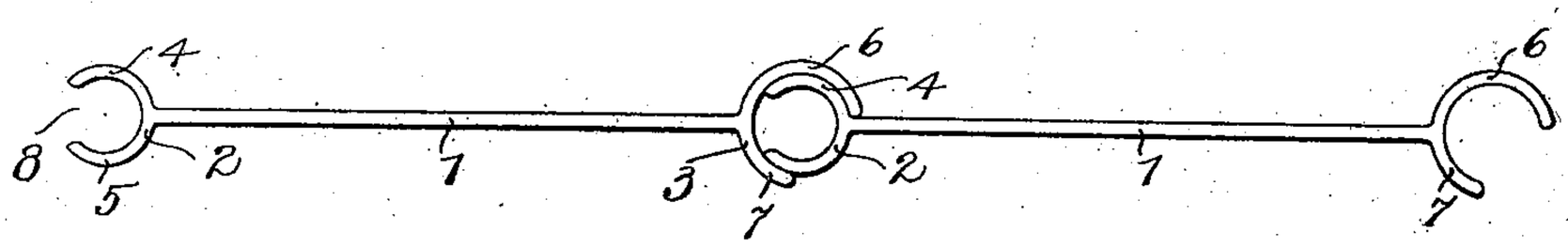


Fig. 2.

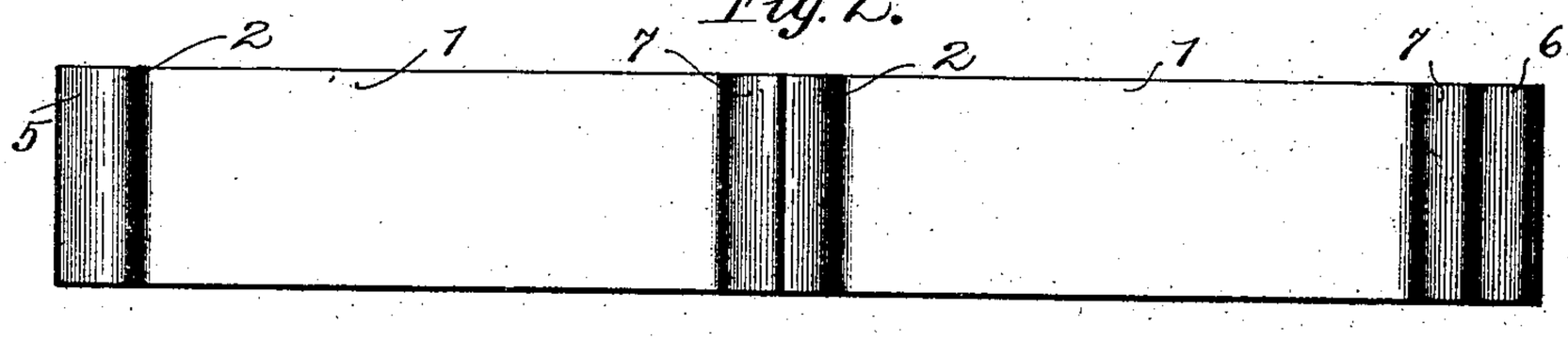
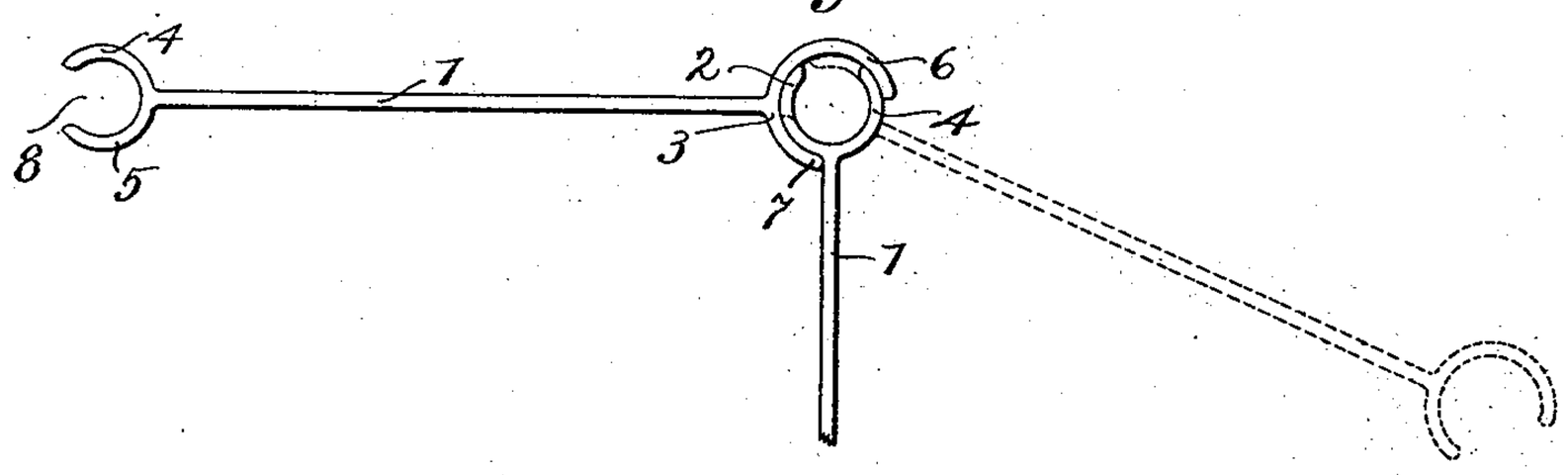


Fig. 3.



Witnesses:
Leonard W. Novander.
Charles J. Schmidt

By

Inventor
Truman Hill
Charles A. Brown
Attorney

UNITED STATES PATENT OFFICE.

TRUMAN HILL, OF CHICAGO, ILLINOIS, ASSIGNOR TO VANDERKLOOT STEEL PILING CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SHEET-PILING.

No. 859,295. Specification of Letters Patent. Patented July 9, 1907.

Application filed April 24, 1905. Serial No. 257,168.

To all whom it may concern:

Be it known that I, TRUMAN HILL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Sheet-Piling, (Case 2,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to sheet piling, and its object is to provide sections of improved construction therefor which may be joined together at various angles and remain interlocking in any position. My invention is, therefore, well adaptable where walls are angular or curved and the sections of my invention are illustrated in the accompanying drawing, in which

Figure 1 is a top view of a section of straight wall, Fig. 2 is a front elevation of Fig. 1, Fig. 3 shows various angular positions which may be assumed by the sections shown in Fig. 1.

Each section consists of a web portion 1, terminating at one end in a ball member 2 and at the other end in a socket member 3. In Figs. 1, 2 and 3 the ball member is formed by the circular wings 4 and 5 and the socket member is formed by the circular wings 6 and 7, the inner radius of the socket member being practically equal to the outer radius of the ball member, and the circular wings may be rolled integral with the web portion. The wing 6 preferably extends through an arc of 180° while the wing member 7 practically extends through the arc of 90°. Thus when the sections are assembled to form a straight wall, as in Fig. 1, the end of the wing 6 will engage one side of the web of the adjacent member, while when the sections are disposed at an angle, such as a right angle, as shown in Fig. 3, the end of the wing 7 will engage the other side of the adjacent web. The arcs of these wings, however, may be made of any degree to meet desired conditions. The ends of the circular wings 4 and 5, instead of being separated by the opening 8, may continue to form a complete circle and this ball member may also be entirely solid. The construction shown, however, is the one best adapted for suitable integral rolling of the section and the space between the wings 4 and 5 after assembly of the sections can be filled with filler, such as wood, concrete, or other material usually employed. The wings 6 and 7 might also be continued to leave an opening between their ends only sufficient to receive the web of the adjacent section, and this opening might be at any part of the socket member, depending upon the angles desired in the wall.

I do not, therefore, wish to be limited to the exact construction shown, but

I claim as new and desire to secure by Letters Patent:

1. In metal sheet piling, the combination of similar sections, each section being rolled integral and comprising a uniplaner web member, wings extending from one end of the web and approaching each other to form a ball member, and wings extending from the other end of the web and approaching each other to form a socket member for receiving the ball member of an adjacent section, whereby the sections are rotatable about each other, the ends of the wings of the socket member being disposed to limit the range of rotation of one member about the other to 90 degrees.

2. In metal sheet piling, the combination of similar sections, each section being rolled integral and comprising a uniplaner web member, wings extending from one end of the web and approaching each other to form a ball member, and wings extending from the other end of the web and approaching each other to form a socket member for receiving the ball member of an adjacent section, whereby the sections are rotatable about each other, the end of one of the wings of the socket member being disposed to lock adjacent members against further rotation when said members reach the same plane, and the end of the other wing of said socket member being disposed to limit further rotation of adjacent members with respect to each other when said members have been brought to right angles.

3. In sheet metal piling, the combination of a plurality of similar sections, each section being rolled integral and comprising a uniplaner web portion, a hollow ball member at one end of the web portion, and wings extending from the other end of the web portion to form a socket member for receiving the ball member of an adjacent section, adjacent members being interlocked against further rotation when in the same plane and when at right angles to each other.

4. In metal sheet piling, the combination of similar sections, each section being formed integral and comprising a web portion, wings extending from one end of said web portion to form a ball member, and wings extending from the other end of said web portion to form a socket member for embracing the ball member of an adjacent section, said wings and web portion being of the same uniform thickness throughout, the end of one of the wings of the socket member being disposed to lock adjacent members against further rotation when said members are in the same plane and the end of the other wing of said socket member being disposed to limit further rotation of adjacent members with respect to each other when said members have been brought to right angles.

In witness whereof, I hereunto subscribe my name this 21st day of April A. D., 1905.

TRUMAN HILL.

Witnesses:
CHARLES J. SCHMIDT,
LEONARD W. NOVANDER.