No. 850,497. PATENTED APR. 16, 1907.

P. A. SCHUCHART.

SHEET PILING.

APPLICATION FILED AUG. 16, 1906.

Fig. 3.

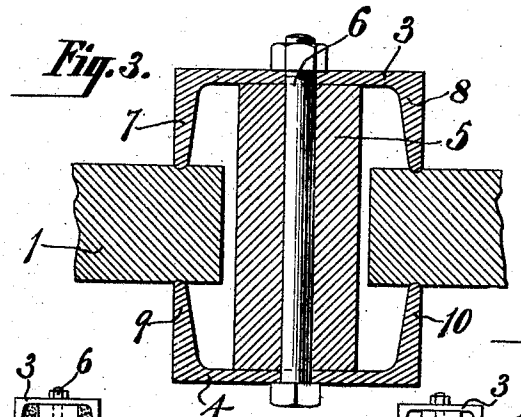


Fig. 1.

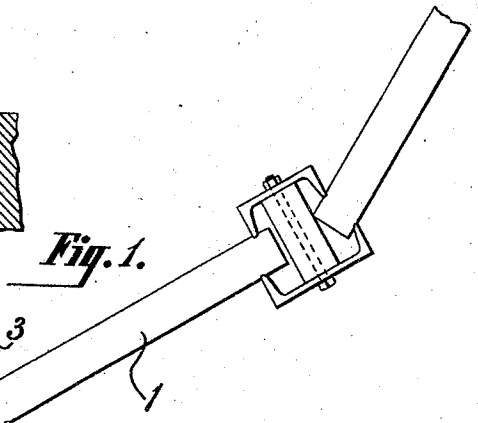
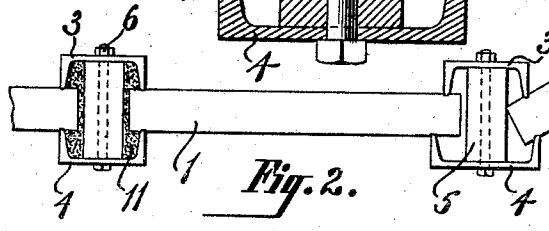
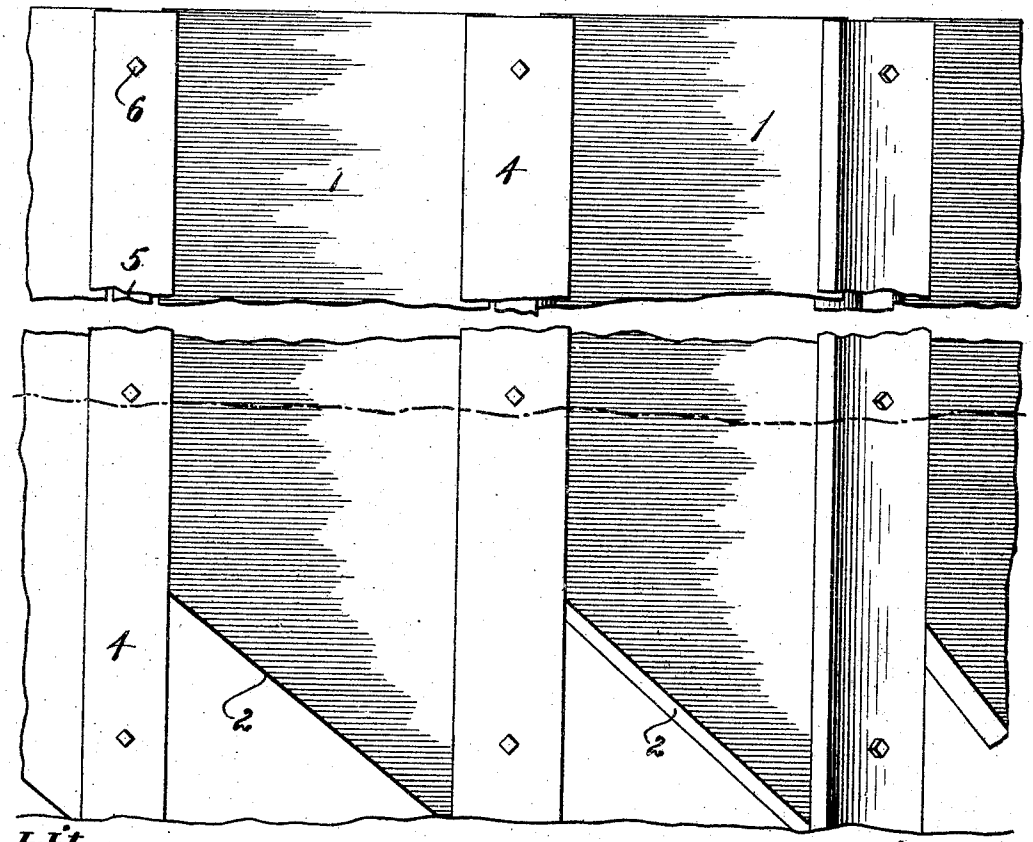


Fig. 2.





Witnesses:

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UNITED STATES PATENT OFFICE.

PAUL A. SCHUCHART, OF NEW YORK, N. Y., ASSIGNOR TO COMPOSITE PILE CONSTRUCTION COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

SHEET-PILING.

No. 850,497. Specification of Letters Patent. Patented April 16, 1907.

Application filed August 16, 1906. Serial No. 330,795.

To all whom it may concern:

Be it known that I, PAUL A. SCHUCHART, a subject of the Crown of Austria, and a resident of the borough of Brooklyn, in the city and State of New York, have invented a new and useful Improvement in Sheet-Piling, of which the following is a specification.

My invention relates to an improvement in sheet-piling, and has for its object to provide a composite sheet-piling composed of wood planks and metal beams which are interlocked in a very simple and effective manner so as to form a strong and water-tight wall suitable for all purposes to which sheet-piling is adapted—such, for instance, as in the construction of sea-walls, docks, pier-foundations, &c.

A further object is to provide a composite sheet-piling which can be set up at a less expense than has heretofore been possible, the number of parts being reduced to a minimum.

In the accompanying drawings, Figure 1 represents a section of my improved composite sheet-piling in top plan. Fig. 2 is a side view of the same, portions of the piling intermediate the top and bottom being broken away; and Fig. 3 is an enlarged horizontal section through one of the plank-connecting beams and adjacent portions of two of the planks.

The sheet-piling is composed of alternating wood planks and plank-connecting beams. The wood planks are denoted by 1 and may be provided at their lower ends with sharpened points 2 for facilitating the driving of the planks into the ground. Each plank-connecting beam is shown as comprising two flanged beams—such, for instance, as channel-beams 3 and 4—spaced apart by a wooden plank 5, the three parts being secured rigidly together at intervals by tie-bolts 6. The flanges 7 and 8 of the beam 3 project inwardly toward the flanges 9 and 10 of the channel-beam 4. These flanges form jaws which are arranged to be embedded in the opposite faces of adjacent planks 1, this result being accomplished by spacing the flanged beams 3 and 4 such a distance apart that the edges of their inwardly-extended flanges will be a less distance apart than the thickness of the planks 1.

When the sheet-piling is intended to be turned at an angle to its general direction, a flanged beam 4 may be employed of greater width than its opposite flanged beam 3, as clearly shown in Fig. 1.

When the sheet-piling is set up in use, the edges of each pair of jaws of the plank-connecting beams will be embedded in the opposite faces of each wood plank 1 with the side edge of the plank spaced from and inclosed by the said jaws and the spacing-plank 5, so that the side edge of the plank is effectually protected and also a cavity is formed within the plank-connecting beam.

The tendency of the wooden planks to swell when the piling is used in connection with hydraulic work will more fully and completely interlock the planks and plank-connecting beams, and thus make the joints waterproof. It it desired to tighten or strengthen the piling, the cavities around the side edges of the wood planks within the plank-connecting beams may be filled with sand, clay, cement, or other suitable material 11.

By constructing a sheet-piling as herein set forth the use of additional means for interlocking the planks and beams is obviated, and it will be seen that planks of ordinary construction not specially shaped may be used, the side edges of the planks being effectually protected by the plank-connecting beams.

What I claim is—

1. A composite sheet-piling comprising alternating wood planks and plank-connecting beams interlocked together, the plank-connecting beams comprising two flanged beams and a wood plank rigidly secured together with the flanges of the beams extended inwardly to form jaws having portions thereof embedded in the opposite faces of the wood planks.

2. A composite sheet-piling comprising alternating wood planks and plank-connecting beams interlocked together, the plank-connecting beams comprising two flanged beams and a wood plank rigidly secured together with the flanges of the beams extended inwardly to form jaws having portions thereof embedded in the opposite faces of the wood planks, one of said flanged beams being of greater width than the other.

3. A composite sheet-piling comprising alternating wood planks and plank-connecting beams interlocked together, the plank-connecting beams comprising two flanged beams

and a wood plank rigidly secured together with the flanges of the beams extended inwardly to form jaws having portions thereof embedded in the opposite faces of the wood planks, the parts being so arranged as to leave cavities around the edges of the planks within the said beams.

4. A composite sheet-piling comprising alternating wood planks and plank-connecting beams interlocked together, the plank-connecting beams comprising two flanged beams and a wood plank rigidly secured together with the flanges of the beams extended inwardly to form jaws having portions thereof embedded in the opposite faces of the wood planks, the parts being so arranged as to leave cavities around the edges of the planks within the said beams and a filling for said cavities.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 14th day of August, 1906.

PAUL A. SCHUCHART.

Witnesses:
F. GEORGE BARRY,
F. G. HACHENBERG.