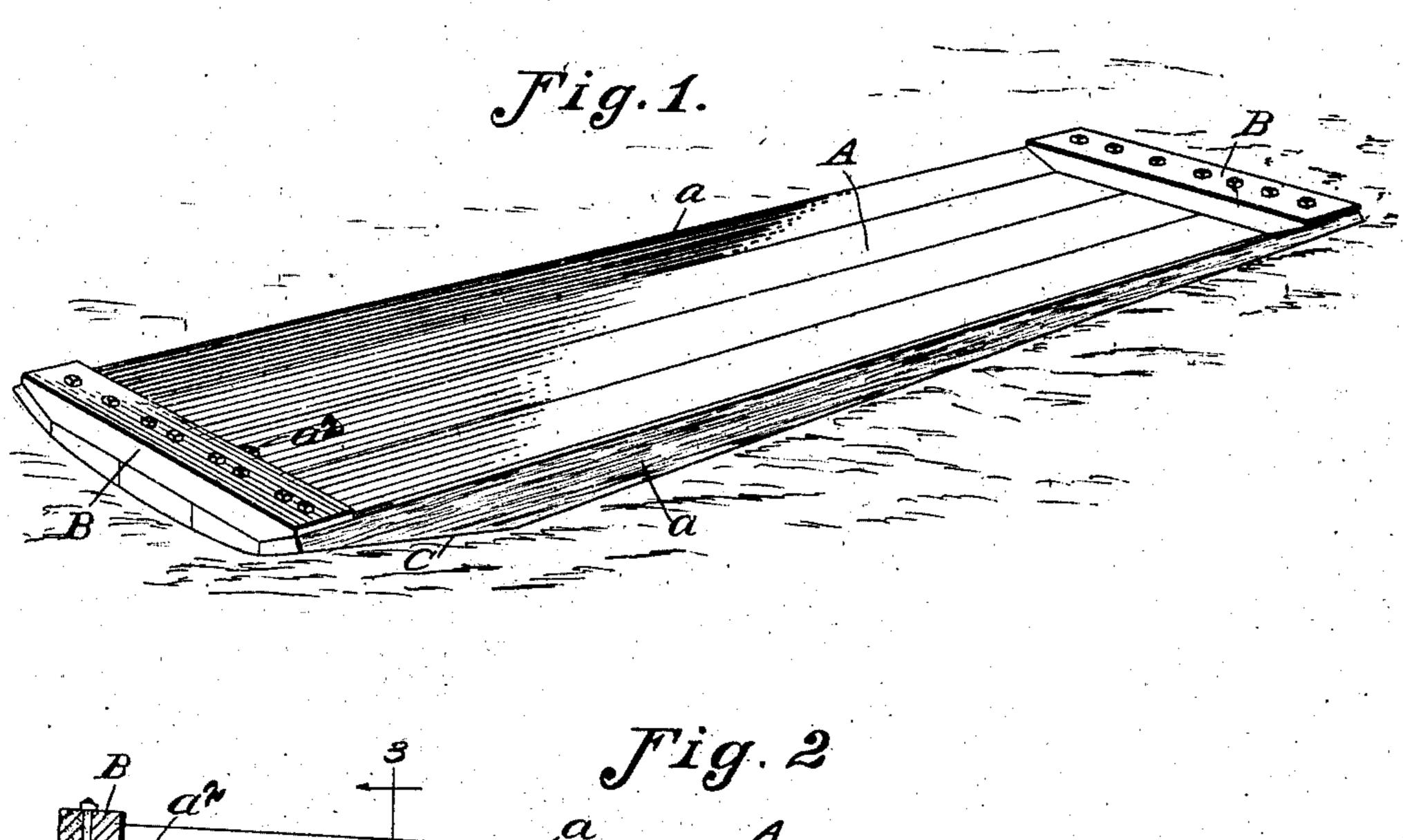
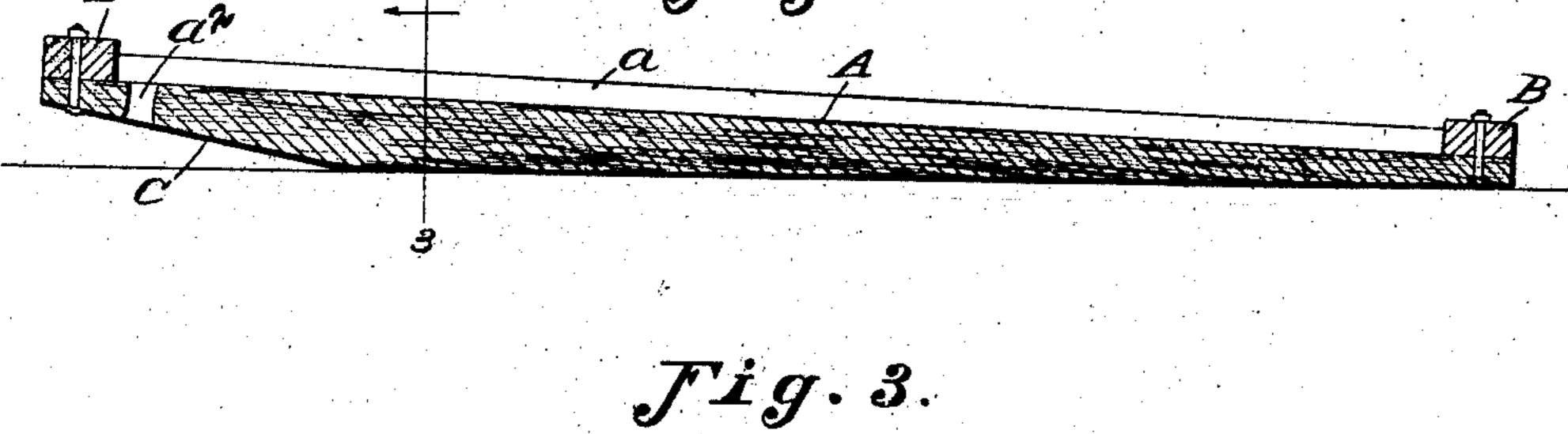
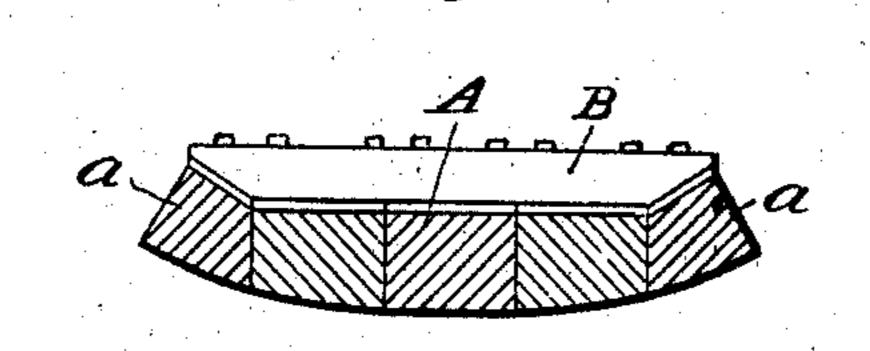
F. C. RAWSON.

STONE BOAT.

APPLICATION FILED JULY 23, 1906.







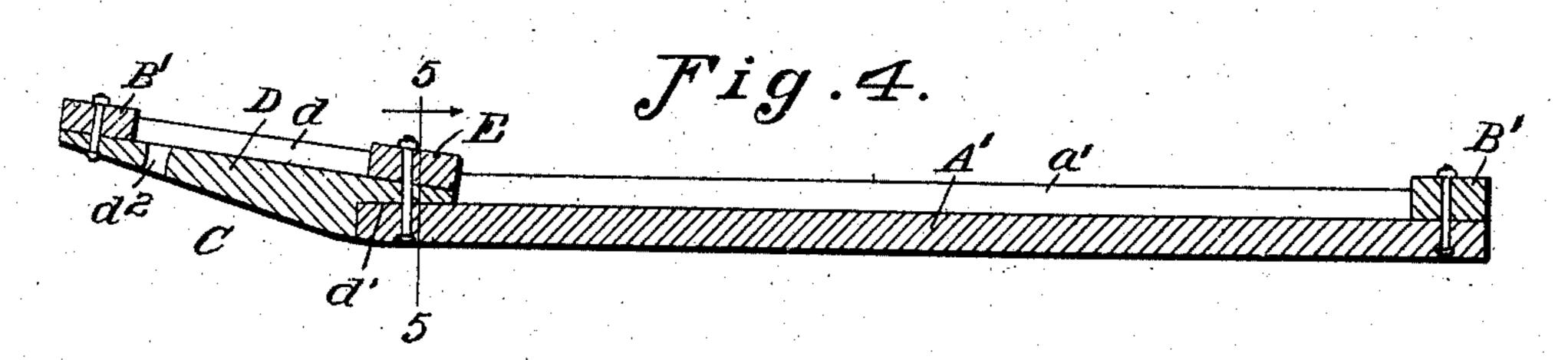


Fig. 5.

Witnesses R.H. Bishop & Bidgee a' Fruk Claven,

Baris Tobaris,

attorneys.

## UNITED STATES PATENT OFFICE.

FRANK C. RAWSON, OF WORCESTER, MASSACHUSETTS.

## STONE-BOAT.

No. 846,617.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed July 23, 1906. Serial No. 327,386.

To all whom it may concern:

Be it known that I, Frank C. Rawson, Worcester, in the county of Worcester, State 5 of Massachusetts, have invented certain new and useful Improvements in Stone-Boats, of which the following is a specification, reference being had therein to the accompanying drawing, in which—

Figure 1 is a perspective view of my improved stone-boat; Fig. 2, a longitudinal vertical sectional view thereof; Fig. 3, a transverse sectional view on the line 3 3 of Fig. 2; Fig. 4, a vertical longitudinal sectional view of a slightly-different form of boat; and Fig. 5, a transverse vertical sectional view thereof, taken on the line 5 5 of

Fig. 4.

Stone-boats as ordinarily constructed have 20 their side edges perpendicular to the lower wearing-surface, thereby forming square corners along the vertical longitudinal edges of the wearing-surface. The result of this is that when the boats are loaded these corners 25 make deep cuts in all soft lawns or fields over

which they are dragged.

The main object of this invention is to avoid these sharp or square corners by inclining a portion of the lower surface of the 30 stone-boat along its longitudinal edges, upward and outward when viewed in transverse vertical section, and to thereby provide a boat having its bottom slightly rounded.

A further object of the invention is to pro-35 vide side strips for the stone-boat, which are so constructed that they not only form that portion of the bottom of the boat which is rounded or inclined upward and outward, but which also form side flanges along the 40 upper surface of the stone-boat to retain the stones thereon, thereby avoiding the necessity of securing extra side pieces or raves to the boat.

Referring to the construction of boat illus-45 trated in Figs. 1, 2, and 3, A designates the main strips or sections of which the body of the stone-boat is constructed. These strips are formed in one piece, as shown, and are preferably formed as described in the patent 50 to M. R. Rawson, No. 802,238, dated October 17, 1905, and in which the grain of wood runs at an angle to the lower wearing-surface of the strips and also at an angle to the upwardly and forwardly inclined wearing-sur-55 face C thereof, so that the wear on said inclined surface is to a certain extent against

the grain of the wood rather than parallel with it, as fully set forth in said patent. To a citizen of the United States, residing at the outer edge of the main body of the boat formed of these strips or sections A are se- 60 cured side pieces a. These side pieces are broader at their under side or wearing-surface than on top, the side edges of said pieces being substantially radial, so that the side pieces taper upwardly when viewed in cross- 65 section, as shown clearly in Fig. 3. The side edges of the main body of the boat are perpendicular to the upper surface thereof. The inner edge of each of said side strips a is secured squarely against one vertical edge of 70 the body of the boat, with the result that the bottom and top of each of said side strips inclines upwardly and outwardly, as shown in Fig. 3. By thus constructing the side pieces a the bottom or wearing-surface of the boat 75 is inclined upwardly along the longitudinal edges thereof, and the top of the boat is also similarly inclined upwardly along said edges. To connect all of the sections of the stoneboat together, transverse end pieces B are 80 secured to the upper sides thereof by means of bolts or other suitable fastening means. These end pieces are beveled on their under sides near their ends to conform to the upwardly and outwardly inclined upper sur- 85 faces of the side pieces a, as shown clearly in Figs. 1 and 3. The side pieces a are preferably of the same shape as the sections of the main body of the boat, with the exception of the inclination of the side edges thereof, and 90 these side pieces are preferably cut from a plank in such a manner that the grain of the wood will run at an angle to the lower wearing-surface of the body of the strip and also at an angle to the under wearing-surface of 95 the nose or forward part of the strip in the same manner as the grain of the section A of the main body of the boat. It will be seen that by forming these side pieces as described the under surfaces thereof round off the bot- 100 tom of the boat and effectually prevent the lower longitudinal edges thereof from cutting soft lawns or fields when the boat is loaded, and the upper surface of said side pieces form longitudinal raised flanges or raves, 105 which serve to retain the stones on the boat, thus doing away with the necessity of securing extra pieces to the boat for this purpose. It will further be noted that these results are secured without weakening the boat in the 110 least and that the side flanges or raves along the upper longitudinal edges of the boat are

as permanent as the boat itself. These raves as ordinarily provided are soon broken and worn and must be frequently renewed.

In Figs. 4 and 5 a slightly-different form 5 of boat is shown. As shown in these figures, the boat is constructed of the strips A', which form the main body part of the boat, and the nose-pieces d, which are secured to the forward ends of the strips A'. These noseto pieces are cut out at their rear ends, as at d', to receive the forward ends of the strips A', and a transverse connecting-strip E is secured over the overlapping parts of these strips by bolts or other suitable fastening 15 means, as shown in Fig. 4. The ends of the strips A' and the nose-pieces D are connected together by transverse end pieces B'. Along the longitudinal edges of the main body of the boat are secured the side pieces a', 20 which are substantially similar in transverse shape to the strips a, (shown in Fig. 3,) so that the boat along its longitudinal edges will incline upwardly and outwardly, as described with respect to Figs. 1, 2, and 3. At 25 the side edges of the nose portion of the boat, as illustrated in Figs. 4 and 5, are secured the side pieces d, which are of the same shape longitudinally as the nose-pieces D and of the same shape transversely as the side 30 pieces A', so that the nose portion of the boat along its longitudinal edge will incline upwardly and outwardly and correspond in transverse section to the transverse section of the main body of the boat.

An aperture  $a^2$  is formed in the forward end of the boat, (illustrated in Figs. 1 and 2,) and a similar aperture  $d^2$  is formed in the forward end of the boat (illustrated in Fig. 4) in order that a draft-chain or other device may

40 be attached thereto.

The lower surface of the section A of the main body of the boat is slightly rounded, and the lower portion of the side pieces a are correspondingly rounded in order that the 45 entire body of the boat will be curved in transverse section, as shown in Fig. 3. This is not essential, however, as I have found that the bottom of the main body of the boat may be flat in transverse section, as shown in 50 Fig. 5, with equally good results.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. A stone-boat comprising a main body 55 part formed with a series of strips cut from a single piece of wood and having the grain thereof running at an angle to the under wearing-surface thereof and having their upper and lower surfaces substantially flat in 60 transverse section, and side strips cut from a

single piece of wood and having the grain thereof running at an angle to the under wearing-surface thereof, said strips being upwardly tapered in transverse section, whereby when they are secured to the main 65 body part their upper and lower surfaces incline upwardly and outwardly with respect to the corresponding surfaces of the main

body part.

2. A stone-boat comprising a main body 70 part formed of a series of longitudinal strips each cut from a single piece of wood and formed with the upwardly and forwardly extending wearing-surface C on the under side thereof at an angle to the under side of 75 the main portion of said strip, the grain of the wood running at an angle to said wearing portions of said strips, the upper and lower surfaces of said body part being substantially flat in transverse section, and side 80 strips cut from a single piece of wood and of the same shape in longitudinal section as the strips of the main part of the boat and being upwardly tapered in transverse section, whereby the upper and lower surfaces there- 85 of will incline upwardly and outwardly with respect to the corresponding surfaces of the main body part, substantially as described and for the purpose set forth.

3. A stone-boat comprising a main body 90 part formed of a series of wood strips whose upper and lower surfaces are substantially horizontal and whose side edges are perpendicular to said upper and lower surfaces, and with a forward upward extending portion, 95 the under side of the said forward portion of the boat being inclined upwardly and forwardly and at an angle to the grain of the wood, whereby the wear on said forward part will be on the ends of the wood fibers in- 100 stead of along the edges thereof, and side strips upwardly tapered in transverse section throughout their length, whereby when they are connected to the perpendicular sides of the body part of the boat the upper 105 and lower surfaces of said side strips will incline upwardly and outwardly, the under side of the forward part of said side strips being inclined upwardly and forwardly, whereby the wear thereon will be against the 110 ends of the fiber of said side strips, and the said side strips will form side flanges for the boat throughout the length thereof.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, 115

this 21st day of July, 1906.

FRANK C. RAWSON.

Witnesses:

John Warden, JOHN H. S. HUNT.