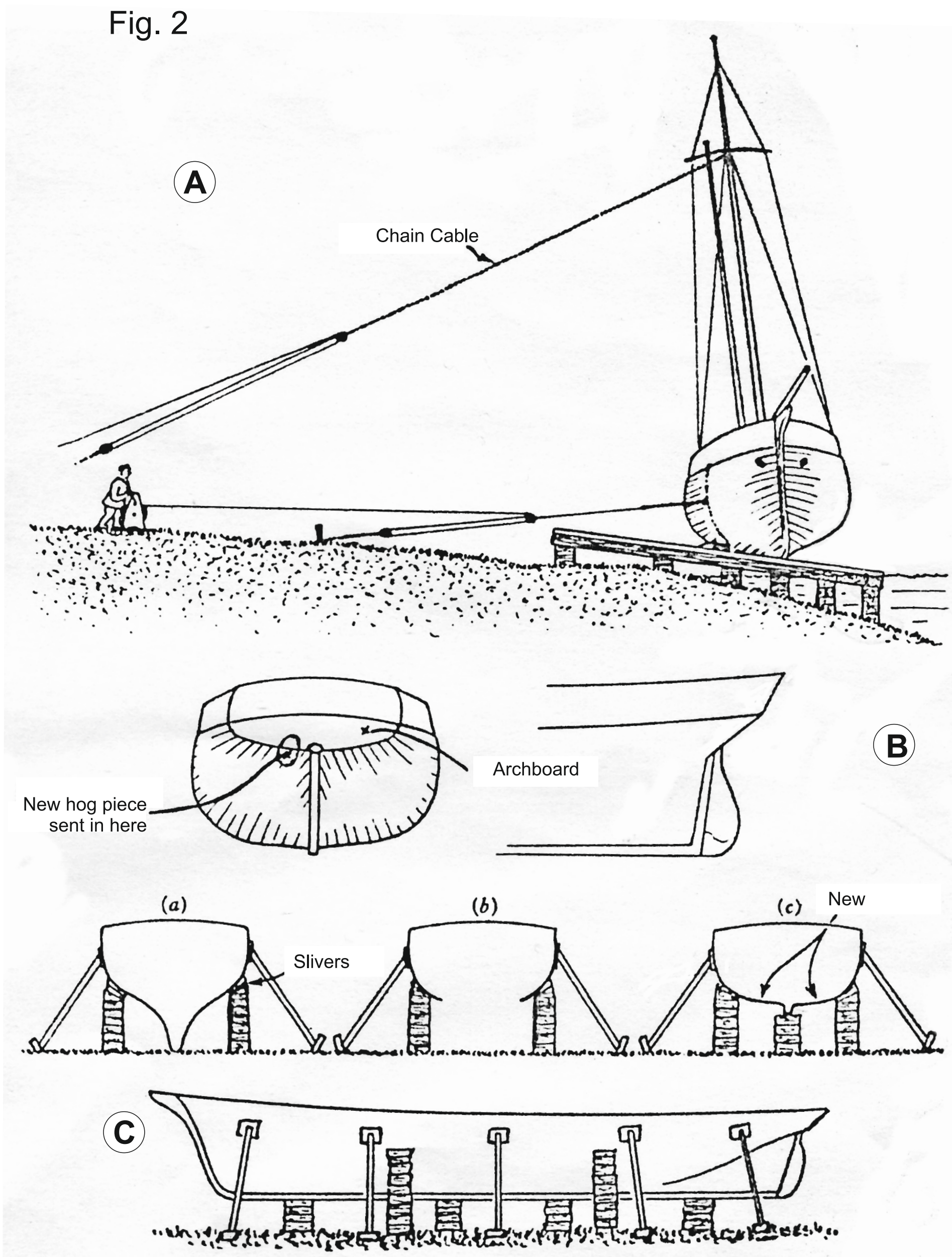


Fig. 2



In a vessel with very wide hatchways you would have to take steps to keep the water out, say by fastening a couple of *dulls* (deals) along fore and aft on top of the coaming, and caulking them.

Then we unmoored the ship and took her round to the verge of the canal just below the Basin. As she moved so we swung her right round till she lay parallel to the west bank again, but now heading inland and with the two canal boats on the far side so that she listed outwards.

By this time we had the ways ready - two or three long baulks of timber, say a foot square, slanting from the water up the grassy shore. They lay parallel and the outer ends were under water supported on blocks sunk under them. We used only two ways for the *Ceres* and the *Agnes*, but three when lengthening was to be done. The ways were greased and runners were prepared on which the ship would rest. The runners were only pieces of oak, say 10 feet by 6 inches by 1½ inches, and to keep them in position ribbands were fastened against the out faces of the ways, not protruding above runner level, and held on by spikes and small shores. As in Figure 1B. A timber about 8 inches square, was bolted down to the runners at right angles and connecting them. This was called the 'Norway balk'.

The ketch had three slings put right round her hull, in the parts where she tapered only a little. They were really chain cable and the chain was made fast to an iron plate on her side fixed by knocking out a treenail and putting a bolt in its place to hold plate, plank and timber together. The slings were stopped to ringbolts or other places on deck to prevent them slipping round the ship. Of course they did not go over the bulwarks, but by taking out the wash-boards (the lowest plank of the bulwarks) we were able to fit the sling close to the hull and deck. They were connected to big anchors and the falls went to the three crab winches.

We wanted to haul the ship to the shore, broadside on, so that her keel, only two or three feet under water by now, would just lip in over the ends of the ways. In some cases we hove the keel right out of the water before it lipped the ways, because craft varied greatly in buoyancy, depth, roundness and flatness of floors. See Figure 1C

Then we hauled her up. There were three big anchors up ashore in line with the ways, and we used three even if there were only two ways. From these anchors there reached down the standing parts of big tackles (you might have a treble block and a double block to each) and from the tackles to the ship were lengths of cable made fast to the slings by a round turn, up on the side, high in the air. The falls of these three tackles led each to its own crab winch, fast to the ground somewhere near the anchors. Each winch had its crew of three or four men and all told there might be twenty or thirty of us on the job. Word would go about the town and in the evening a crowd would come over to watch and help. With twenty or thirty men at the tackles it would be jolly and easy going, for the worst of the job would be over by that time, and there would be beer about.

So we hove away, and the keel came in on the ways. Then as we hauled she wanted to come more upright. We let her do that by slacking off the heaving-down tackles in the canal boats. Then her bottom began to come out of the water and she was no longer afloat. Up the ways she came, with pauses to get her more upright, until her outer bilge was on the ways as well as her keel. At that angle she stayed until we had got her quite clear of the water with room to walk round her in the dry and to work in comfort. While the last turns were being taken the boss was standing off to one side not far from her bows, and at last his arm went up: 'Vast Heaving.'

The two masthead chains which had helped to support the masts to starboard had their lower ends cast off, and were now used for masthead tackles taken away up shore fast to a tree or a post. When we hove on these the old vessel came upright and then gently fell over with her starboard bilge resting on the Norway balk; not a big fall, for these coasters have little rise of floor. Some have bilge keels too and lie almost upright. What with the slant of the ways and the two-inch depth of keel, the *Ceres* hardly listed at all. As in Figure 2A

We put blocks under her, perhaps three sets

under her keel and two under her starboard bilge, but we did not lift her off the blocks by jacking or wedging. She was then ready for work, off the ground by about the height of the parlour table.

So far I have assumed that all goes without a hitch, but we sometimes found one end of the ship wanted to come up faster than the other. Often this meant another temporary purchase, say at the stern, because it was necessary above all to keep her square across the ways as she moved. To fix a purchase to the stern we would bore a hole through the stern-post and fit a ring bolt to it, with a forelock on the other side.

And the work we did then we took out bad planks, put in new, caulked her, put in a new stern-post and archboard and at one time or another renewed probably every part of the *Ceres*. Before my time she had been lengthened after being hauled out. Lengthening was usually done amidships, but in the case of the *Ant* my grandfather opened her up aft and added a longer after part.

Rebuilding the *Lady Acland* into the *Agnes* during 1903-4 was the last big job we ever did in the Bude yard. We hauled her out as I have described, took out her masts and much of her