(No Model.)

J. BAKER

CANAL BOAT.

No. 253,965. Patented Feb. 21, 1882.

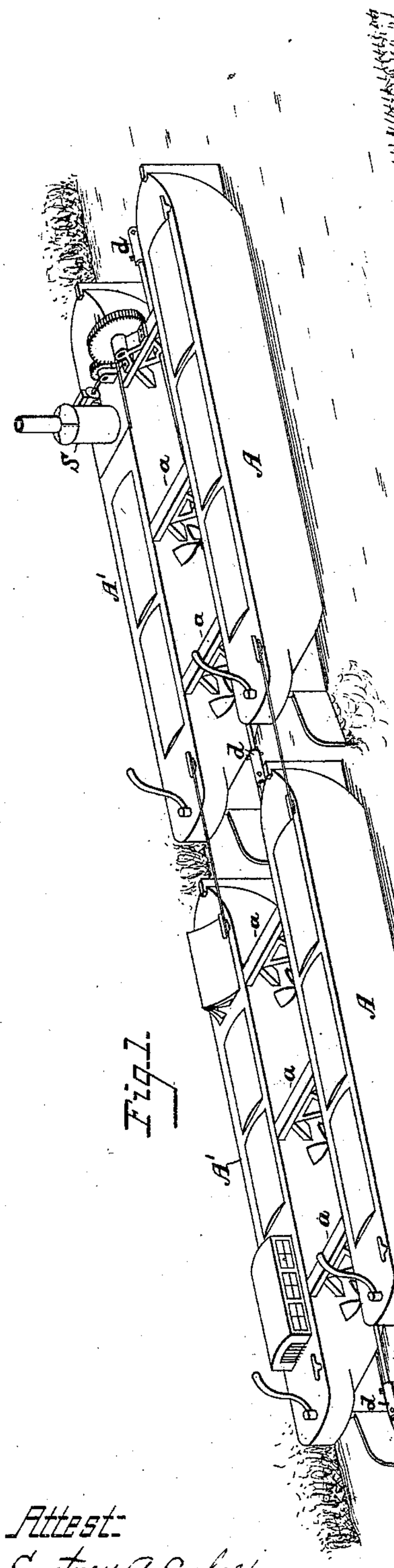

Fig. 1.

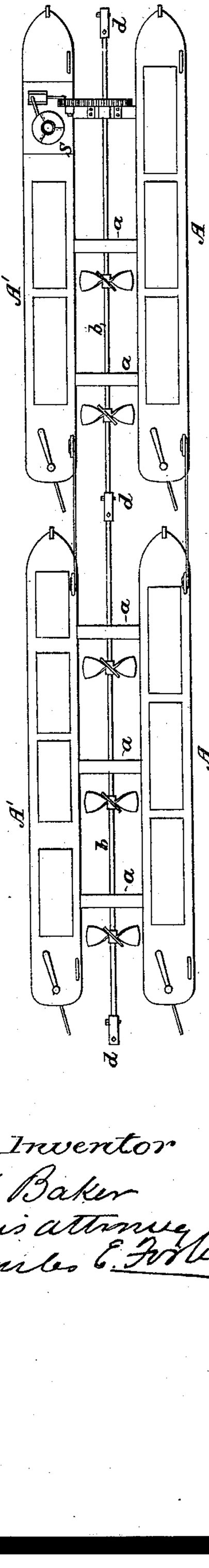

Fig. 2.

Attest:
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UNITED STATES PATENT OFFICE.

JACOB BAKER, OF GREENVILLE, OHIO.

CANAL-BOAT.

SPECIFICATION forming part of Letters Patent No. 253,965, dated February 21, 1882.

Application filed January 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, JACOB BAKER, of Greenville, in the county of Darke and State of Ohio, have invented certain new and useful Improvements in Canal-Boats, of which the following is a specification.

The object of my invention is to propel canal-boats without imparting to the water in the canal the washing motion so destructive to the banks, and this I effect, first, by dividing the boats so as to present less flat-bow surface tending to "roll up" the water, while affording a central channel; and, secondly, by placing in such channel a series of propellers, causing the water to flow to the center of the canal rather than to the sides. My invention further consists in providing each boat with a propeller-shaft, with means for coupling to the shafts of other boats, so that all can be driven from one engine.

In the drawings, Figure 1 is a perspective view showing a gang of boats with my improvements. Fig. 2 is a plan view.

To avoid the displacement and rolling up of the water, common when boats having the usual wide, nearly flat, bows are used, which results in a deleterious washing of the canal-banks, I divide the boat into two long narrow portions, A A′, each of the same length and depth as the usual boat of the same capacity, but of about one-half the width, and these portions I connect by braces or beams *a a*, suitably arranged at proper intervals. By this means one-half the displacement is toward the center. Moreover, there is less flat or transverse surface, and therefore less piling up of the water at the bow.

In connection with the boat so constructed, I use a series of propellers arranged upon a longitudinal shaft, *b*, turning in bearings central with the space between the sections A A′, thereby avoiding the disturbance of the water that results from the use of a single propeller at one point and confining the disturbance to the center of the channel. The shafts *b* may be extended to the ends of the boats and provided with coupling devices *c d*, whereby the shaft of one boat may be coupled to that of the next, and so on, the forward boat or tug being provided with suitable driving mechanism, S, by means of which rotation is imparted to all the shafts. The couplings *d* are made to be readily disconnected, so that the gang may be easily broken up to pass through locks or for the purpose of unloading, &c., and suitable detachable braces and stays are used to preserve the line of the boats when connected, and to prevent any disalignment of the shaft-sections.

I claim—

1. The combination of the connected sections A A′ and the shaft *b*, extended to the ends of the boat and provided with couplings for connecting the same to the shafts of other boats, substantially as specified.

2. The combination of a series of boats, each having a longitudinal propeller-shaft coupled detachably to the shafts of the contiguous boats in the same line, and a driving-engine arranged upon one of the boats and propelling all the shafts, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JACOB BAKER.

Witnesses:

J. H. LYNCH,

G. F. SCHMERMUND.