

No. 817,130.

PATENTED APR. 3, 1906.

M. NALETOFF.
SUBMARINE BOAT.
APPLICATION FILED AUG. 23, 1905.

Fig. 1.

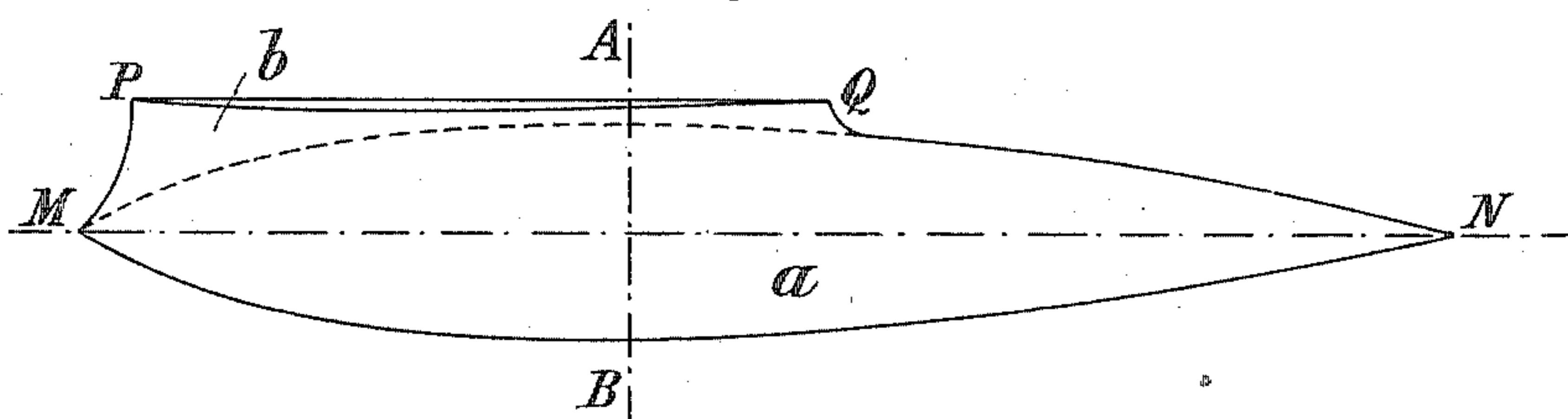


Fig. 2.

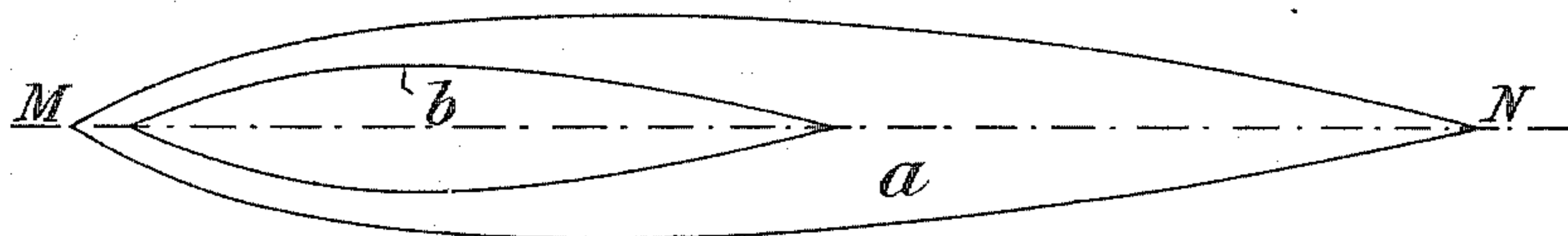


Fig. 3.

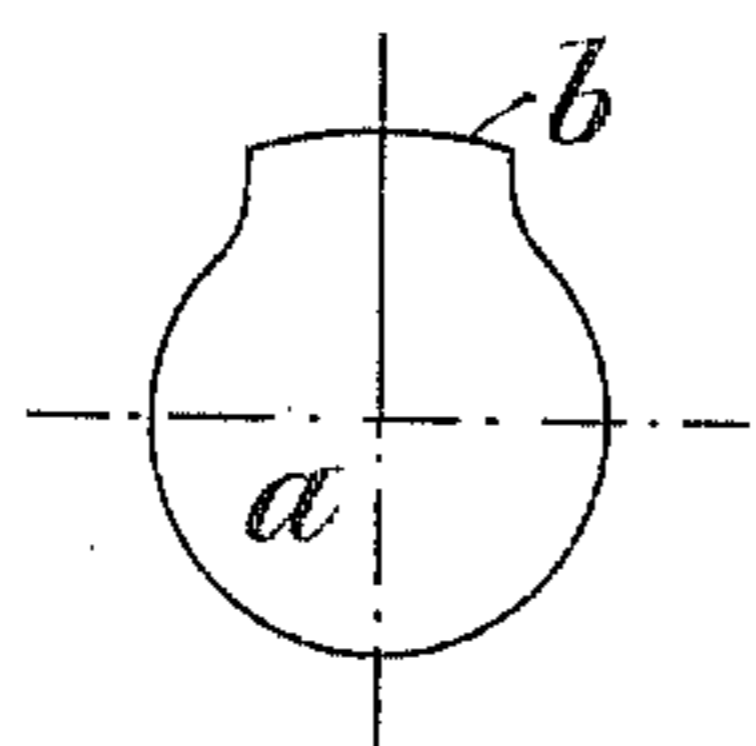
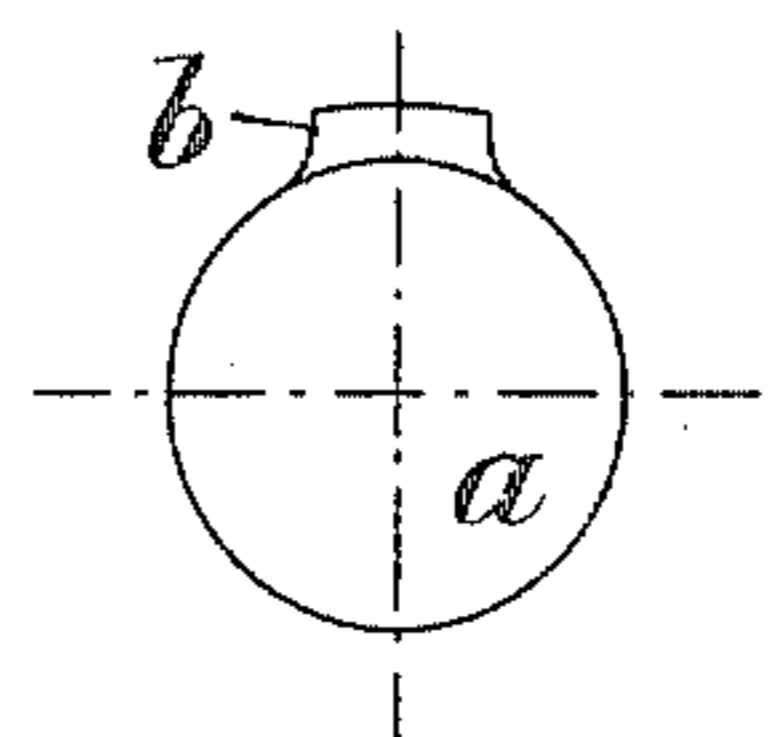


Fig. 4.



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MICHEL NALETOFF, OF ST. PETERSBURG, RUSSIA.

SUBMARINE BOAT.

No. 817,130.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed August 23, 1905. Serial No. 275,350.

To all whom it may concern:

Be it known that I, MICHEL NALETOFF, a subject of the Emperor of Russia, residing at St. Petersburg, in the Empire of Russia, have
5 invented a new and useful Submarine Boat, of which the following is a specification.

Theoretical calculations have shown that a submarine boat can be better balanced during its motion if its body or hull is given such
10 a shape that its center of gravity is placed on the front side at the greatest possible distance from the middle of its length.

My invention relates to a special shape of the submarine boat which satisfies the said
15 condition and is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the body or hull of a submarine boat. Fig. 2 is a plan of the same. Fig. 3 is a front view of the same, and
20 Fig. 4 is a cross-section through the same on the line A B in Fig. 1.

Similar letters of reference refer to similar parts throughout the several views.

The body or hull of the submarine boat has
25 the external shape of a geometrical solid *a*, traced out in revolution with a superstructure *b*. The solid *a* (partly indicated by a dotted line in the upper left part in Fig. 1) resembles a cigar and is pointed at both ends.
30 It is shown as unsymmetric with regard to its middle, as it is more sharply pointed at the rear end N than at the front end M. However, where so preferred, the solid *a* may also be made symmetric, its halves being congruent with each other. The line A B indicates
35 the plane of the midship-frame, in which the solid *a* has the greatest area. The superstructure *b* is in its elevation defined by a horizontal line P Q in Fig. 1, and its deck is curved
40 in the cross-section in a similar manner as an

ordinary ship's deck. In the plan the superstructure *b* resembles somewhat the outlines of the solid *a*. (See Fig. 2.) The sides of the superstructure *b* lead down to the surface of the solid *a* by means of curved faces, as is
45 clearly shown at Figs. 1, 3, and 4.

It is essential that the superstructure *b* be placed on the front part of the solid *a*, so that the point of gravity of the body or hull of the boat, comprising the solid *a* and the super-
50 structure *b*, is on the front side at the greatest possible distance from the middle of the length M N of the boat.

The shape of the solid *a* and the superstructure *b* and the location of the latter may be
55 varied, care being taken that the above condition be complied with. In this case it will be easier to balance the submarine boat during its motion than hitherto.

What I claim as my invention, and desire
60 to secure by Letters Patent, is—

A submarine boat having the external shape of a geometrical solid traced out in revolution and similar to a cigar and pointed at both
65 ends in combination with a superstructure placed on the front part of the solid and having a deck which in plan somewhat resembles the solid, while the sides of the superstructure lead to the surface of the solid by means
70 of curved surfaces, the center of gravity of the whole being on the front side of the middle.

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

MICHEL NALETOFF.

Witnesses:

N. D. FOWSIN,
AUGUST MIGILIS.