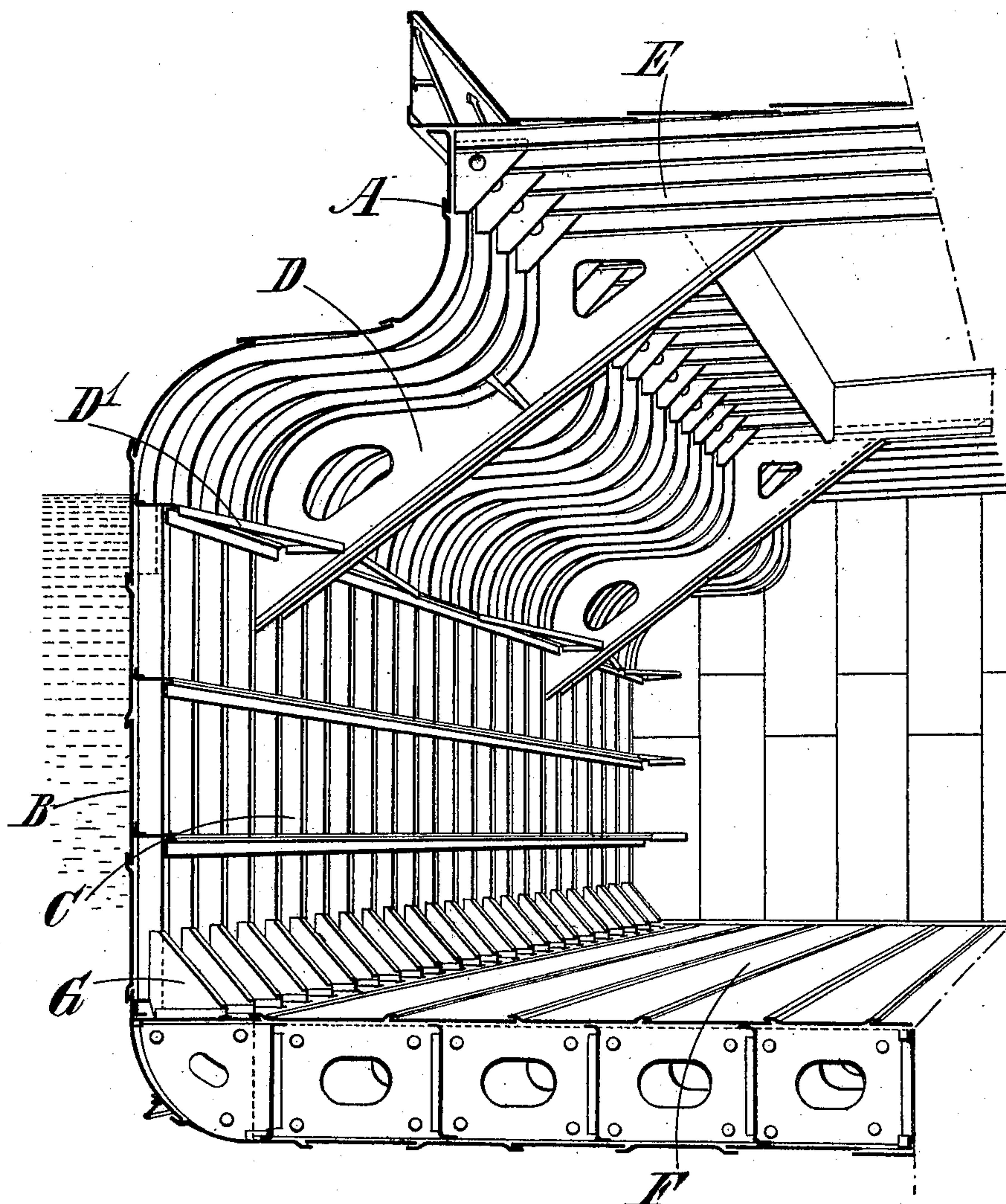


No. 887,076.

PATENTED MAY 12, 1908.

C. D. DOXFORD.
TURRET OR SIMILAR VESSEL.
APPLICATION FILED NOV. 6, 1906.



Witnesses:

Thomas Durant
Melville W Church

Inventor.

Charles D. Doxford
by Church & Church
his attys

UNITED STATES PATENT OFFICE.

CHARLES DAVID DOXFORD, OF SUNDERLAND, ENGLAND.

TURRET OR SIMILAR VESSEL.

No. 887,076.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed November 6, 1906. Serial No. 342,235.

To all whom it may concern:

Be it known that I, CHARLES DAVID DOXFORD, a subject of the King of England, residing at Sunderland, in the county of Durham, England, have invented certain new and useful Improvements in Turret or Similar Vessels, of which the following is a specification.

This invention relates to improvements in vessels of the well known turret type shown in my prior U. S. Patent No. 485,462 in which the upper portion of the vessel is in the form of a continuous girder somewhat narrower than the breadth of the vessel and extending over the whole or the greater portion of the length of the vessel and providing a longitudinal strengthening frame or girder. Previously I have invented a construction of vessel of this type in which the vertical stanchions and horizontal beams formerly employed were dispensed with; but the construction comprised a number of specially strong webs and large lower gusset plates placed at intervals along the side walls of the vessel.

The object of the present invention is to simplify the structure of turret vessels of this type, and I have now discovered that all the necessary strength or rigidity can be obtained in a turret vessel without any beams or stanchions and without any special webs or plates.

A turret vessel embodying this invention comprises a laterally unobstructed main hull, transverse bulkheads dividing the hull at intervals, an upper portion of the hull in the form of a continuous girder somewhat narrower than the main hull, and narrower internal frames extending from top to bottom of the hull and arranged to leave a clear unobstructed space within the frames, without any special webs or lower gusset plates as hitherto used.

The accompanying drawing is a transverse section and perspective view of one of Doxford's well known turret vessels embodying this invention.

The turret A as usual is in the form of a continuous girder somewhat narrower than the vessel and extending over the whole or the greater part of the length of the vessel. Thus the upper part of the vessel constitutes in effect a longitudinal girder.

The side walls B are provided with frames C. Large gusset plates D extend from the frames C to the deck beams E at intervals in those portions of the vessel where the turret A merges into the side walls B, and these gusset plates are supported by brackets D¹ and their thrust distributed over a large area of the side walls: or these brackets may be extended so as to form a continuous wide stringer plate. Between the frames C of the opposite side walls the hold is unobstructed; no stanchions, webs or large gusset plates being provided. The frames C are connected to the double bottom F by knee plates G which occupy no important space in the hold.

The hull or lower part of the vessel constitutes in effect a longitudinal girder facing in a direction to the upper longitudinal girder.

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

In a turret vessel the combination of a hull B, a turret A forming the upper part of the vessel and merging into the hull, deckbeams E extending across the turret, a double bottom F at the bottom of the hull, narrow internal frames C extending from the deck beams E to the double bottom F, leaving an unobstructed space from side to side between the frames C, large gusset plates D extending from the frames C to the deck E at intervals in those portions of the vessel where the turret A merges into the hull B and small knee plates G securing the internal frames C to the double bottom F.

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

CHARLES DAVID DOXFORD.

Witnesses:

EDMUND C. THOMPSON,
ROBERT YOUNGS.