

Fig. 1. An attractive naval destroyer that makes good use of the new Triangular Flexible Plates.

OUR new model this month is the fine naval destroyer shown in Fig. 1, and it will be seen that it makes good use of the new Triangular Flexible Plates and other new parts, which contribute greatly to its attractive and realistic appearance.

Construction of the ship is begun by bolting together the Plates that form the sides of the hull. Each side consists of a $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Triangular Flexible Plate at the bow, two $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flexible Plates and three $5\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plates. A $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Triangular Flexible Plate 1 is fixed between the rear $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flexible Plate and the front $5\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate, and is edged as shown by a $2\frac{1}{2}''$ Strip. The top edges of the $5\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plates are strengthened by $12\frac{1}{2}''$ Angle Girders 2 on the inside, with a $12\frac{1}{2}''$ Strip extended by a $2\frac{1}{2}''$ Strip bolted along the outside edges of the Plates.

A built-up strip 3 is fixed to each side as shown. This strip consists of a $2''$ Strip and two $5\frac{1}{2}''$ Strips.

The sides of the hull are connected by a $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flanged Plate 4, and by $2\frac{1}{2}''$ Strips bolted between the ends of the Angle Girders 2. The $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Triangular Flexible Plates at the bows are bolted together, and the front ends of the strips 3 are connected to them by a Fishplate. A $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strip is bolted between the lower edges of the sides of the hull amidships and a $1\frac{1}{2}''$ Strip is fixed to Angle Brackets held by bolts 5. The rounded stern is a curved $5\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate strengthened by two Formed Slotted Strips. A $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate is bolted to the rear flange of the Flanged Plate 4.

At the bow two $3\frac{1}{2}''$ Strips on each side

are bolted together and are attached to the Flanged Plate 4. The front ends of the Strips are connected by a $1\frac{1}{8}''$ Bolt, and the deck between them is filled in by a $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate and a $2\frac{1}{2}'' \times 2''$ Triangular Flexible Plate 6. The deck between the Angle Girders 2 is formed by three $12\frac{1}{2}''$ Strips, the outer Strip on each side and each Angle Girder being lengthened towards the stern by a $3\frac{1}{2}''$ Strip. The centre $12\frac{1}{2}''$ Strip is extended by a $2\frac{1}{2}''$ Strip. The stern ends of the $3\frac{1}{2}''$ Strips are fixed to a $2''$ Strip, which is attached to the sides of the hull by Angle Brackets. Two $2\frac{1}{2}''$ Stepped Curved Strips also are supported by the $2''$ Strip, with their ends connected by a $1\frac{1}{8}''$ Bolt.

The superstructure that supports the mast and funnel is assembled as a unit, and is attached to the hull by Angle Brackets when it is completed. Each side of the superstructure consists of two $5\frac{1}{2}''$ Strips connected by Fishplates. The sides are joined together by $1\frac{1}{2}''$ Strips, one at each end attached to Angle Brackets, and the top is filled in by three $5\frac{1}{2}''$ Strips.

The mast is an $8''$ Rod fixed in a Double Arm Crank, and it is fitted with a Coupling 7 and two Collars 8. Two $1''$ Rods, each of which carries a Cord Anchoring Spring at its outer end, are fixed in the Coupling. A Chimney Adaptor is held by a nut on a bolt screwed into the lower one of the Collars 8, and two Right-Angle Rod and Strip Connectors are mounted on another bolt screwed into the same Collar. A $5''$ Rod in each Right Angle Rod and Strip Connector is attached to the superstructure by a Rod and Strip Connector. Two Rod

and Strip Connectors are fixed by a nut on a bolt screwed into the Collar 8 at the top of the mast.

The funnel is formed by two $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plates and two $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Triangular Flexible Plates, and is attached to the superstructure by two Angle Brackets. The platform behind the funnel is a $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flanged Plate edged by two $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strips. The A.A. guns on the platform are $\frac{3}{4}''$ Bolts, each of which is fixed by a nut in an Obtuse Angle Bracket. The Obtuse Angle Brackets are bolted to a 1" Triangular Plate, which is lock-nutted to the platform and is spaced from it by Washers.

The superstructure below the bridge consists of a $4\frac{1}{2}''$ Strip and a $4\frac{1}{2}''$ Angle Girder 9 on each side connected by Fishplates, and attached to the Flanged Plate 4 by Angle Brackets. The Angle Girders 9 are connected by two Semi-Circular Plates that form the gun platform, and by a $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate to which two $1\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strips 10 are attached by means of Angle Brackets.

The bridge is assembled by bolting $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flanged Plates to $2\frac{1}{2}''$ Angle Girders 9. The Flanged Plates are

connected at the front by two $1\frac{1}{2}''$ Strips, and at the rear by a vertical $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate. The top of the bridge is another $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flanged Plate fixed in place by nuts on two $3''$ Screwed Rods 11. A

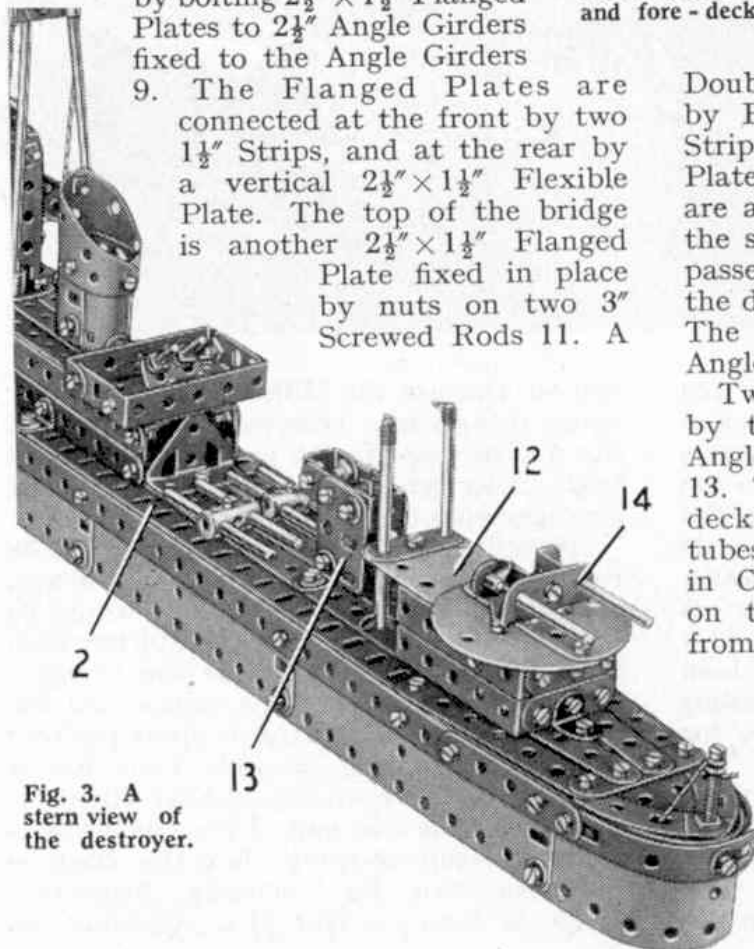


Fig. 3. A stern view of the destroyer.

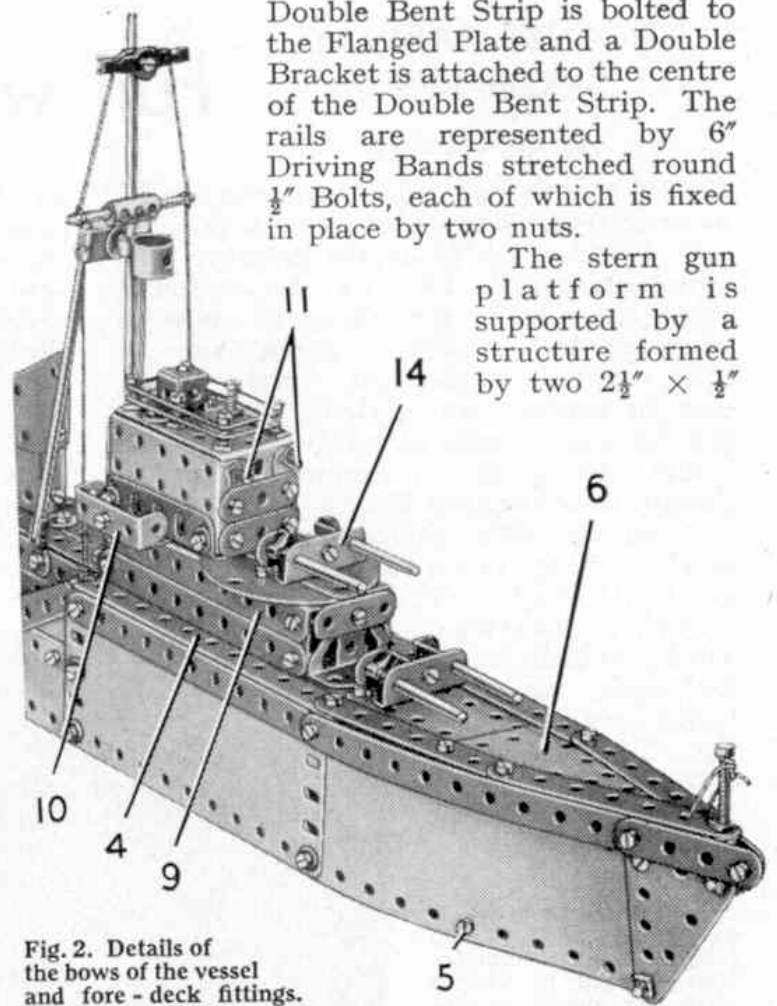


Fig. 2. Details of the bows of the vessel and fore-deck fittings.

Double Bent Strip is bolted to the Flanged Plate and a Double Bracket is attached to the centre of the Double Bent Strip. The rails are represented by 6" Driving Bands stretched round $\frac{1}{2}''$ Bolts, each of which is fixed in place by two nuts.

The stern gun platform is supported by a structure formed by two $2\frac{1}{2}'' \times \frac{1}{2}''$

Double Angle Strips on each side connected by Fishplates and joined across by $1\frac{1}{2}''$ Strips at each end. Two Semi-Circular Plates and a $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plate 12 are attached to Angle Brackets bolted to the sides of the structure. Two $3\frac{1}{2}''$ Rods passed through the Flexible Plate 12 and the deck are held in place by Spring Clips. The structure is attached to the deck by Angle Brackets.

Two $1\frac{1}{2}''$ Angle Girders are connected by two Double Brackets, and to each Angle Girder is bolted a $1\frac{1}{2}''$ Flat Girder 13. The Flat Girders are attached to the deck by Angle Brackets. The torpedo tubes are represented by $2\frac{1}{2}''$ Rods fixed in Couplings, each of which is screwed on to a bolt passed through the deck from underneath.

Each gun turret is made by bolting a Double Bent Strip to a Trunnion 14 as shown in Fig. 2. The guns are 2" Rods and are held in place by Spring Clips. The turrets swivel on $\frac{3}{8}''$ Bolts lock-nutted to the gun platforms.

(Continued on page 408)

Atomic Age Fighters—(Continued from page 372)

skids or hydro-skis, or even to belly-land on a rubber deck fitted with carrier-type arrester gear. This would necessitate a change to turbojet or rocket-power; but this seems inevitable in time anyway, as nobody has yet perfected a supersonic turboprop, and the 500 m.p.h. top speed of the XFY-1 and XFB-1 is hardly fast enough for modern interception.

Nevertheless, they represent a bold step in the right direction, and Lockheed, Ryan and other companies are known to be developing also V.T.O. aircraft for the U.S.A.F., to defend vital targets miles from the nearest airfields. These machines will almost certainly be turbojet-powered and, if they work, they will bring nearer the day when we can say good-bye to long, expensive military airfield runways and large aircraft carriers.

The Tulip Rally in a Consul—

(Continued from page 376)

Imagine our delight when we reached Luxembourg, the next morning, on the homeward run to Holland, to discover that our two Consuls were the only cars left in their Class without loss of marks.

From Luxembourg to the final control at Noordwijk aan Zee was merely a monotonous sunny nine-hour run enlivened after crossing the Dutch Frontier by a vociferous welcome from thousands of Dutch Rally enthusiasts, the decorating of the Consul with the traditional Tulip Wreath and the free use of the magnificent Phillips Factory canteen, complete with electric razors!

After the technical inspection, passed by all the Fords with flying colours, our team met in our hotel, and we anxiously compared notes. To our delight, in spite of the misfortunes of Cuth Harrison and Nancy Mitchell, Reg Phillips and Denis Scott were leading their Class with the Zephyr, Gatsonides was leading his Class with an Anglia, we had virtually won our Class, and what pleased us more, Bill Fleetwood and George Reed were an undisputed second to us. It was a tired but happy Works Team that left for England the following day.

Stamp Collectors' Corner—(Continued from page 403)

carrying across his shoulders a calf that he had been too late to deliver for sacrifice, as was a Greek custom in those days. Back went the youth with the animal, which lived to grow into a cow to produce an abundance of milk, hence the smile.

Another stamp with an intriguing design is the 4,000 drachma. This depicts Dionysus on his voyage. Bacchus—his other name—discovered the culture of grapes, and spent many years abroad, returning later to Greece. He had all kinds of adventures which there is no room to tell here, but for fancifulness not even Greek folklore has anything to beat it.

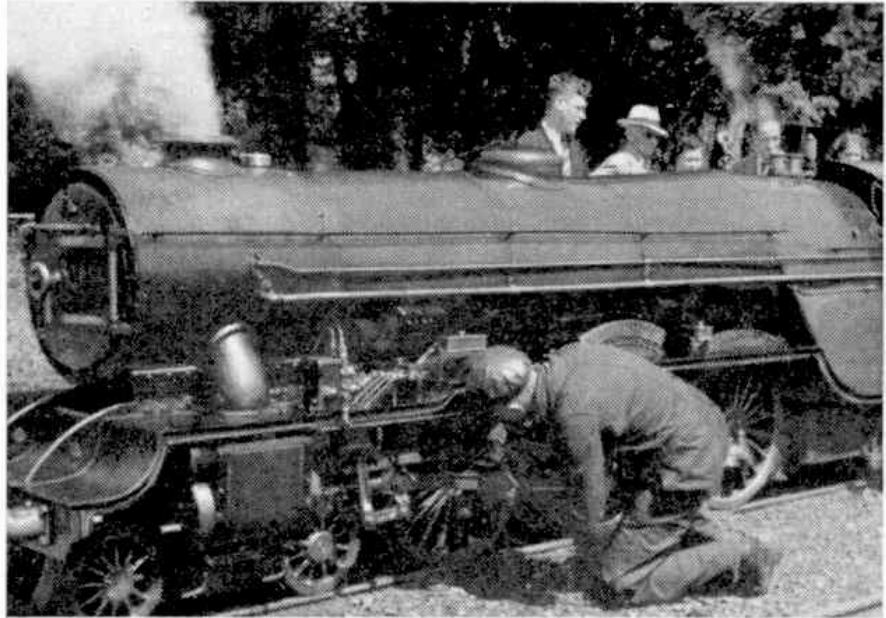
And now we come to the top value, the 20,000 drachma. Greek pitcher bearers are shown. Who knows whether they are carrying water or wine for some Bacchanalian feast, and who cares? For the stamp is quite delightful and rounds off one of the most interesting sets ever issued.

I do hope that no great Greek scholar reads these lines, for we all remember from our school days how such gentlemen love to argue, and they would certainly be able to pick holes in my timid classical

essay. But never mind, get this set, and then go to the public library for books on Greek mythology so that you can read those fascinating stories. Pick out the tit-bits to write up your set when mounted, and surely the result will interest everybody, even if they don't collect stamps.

New Model—(Continued from page 395)

Parts required to build the model Destroyer: 5 of No. 1; 11 of No. 2; 2 of No. 2a; 8 of No. 3; 1 of



Oiling round at Hythe on the 15 in. gauge Romney, Hythe and Dymchurch Railway. The engine, one of the well-known one-third full size Pacifics of the R. H. and D., was photographed by M.M. reader J. I. Dibley, of Bexhill-on-Sea.

No. 4; 6 of No. 5; 3 of No. 6; 12 of No. 6a; 2 of No. 8; 2 of No. 9a; 2 of No. 9d; 2 of No. 9f; 11 of No. 10; 3 of No. 11; 25 of No. 12; 2 of No. 12c; 1 of No. 13a; 2 of No. 15; 2 of No. 16; 4 of No. 16a; 6 of No. 17; 2 of No. 18b; 16 of No. 35; 207 of No. 37a; 170 of No. 37b; 52 of No. 38; 1 of No. 40; 4 of No. 45; 2 of No. 48; 7 of No. 48a; 4 of No. 51; 1 of No. 52; 2 of No. 59; 3 of No. 63; 1 of No. 77; 2 of No. 80c; 2 of No. 90a; 2 of No. 103h; 5 of No. 111; 6 of No. 111a; 6 of No. 111c; 2 of No. 111d; 5 of No. 126; 1 of No. 164; 4 of No. 176; 1 of No. 179; 2 of No. 186; 7 of No. 188; 7 of No. 189; 4 of No. 192; 4 of No. 212; 2 of No. 212a; 4 of No. 214; 2 of No. 215; 6 of No. 221; 1 of No. 222.

THIS MONTH'S SPECIAL ARTICLES

	Page
Towing a Great Liner	362
by the Editor	
New B.R. Engines	365
Time Told by the Sun	368
by A. Holt	
Atomic Age Fighters	370
by John W. R. Taylor	
The Tulip Rally in a Consul	374
by J. Reece	
How Things are Made: Ball and Roller Bearings	377
by Bernard Clement	
A Pioneer Traction Engine	384
Powerhouse Deep in a Mountain	388
by Frank Illingworth	