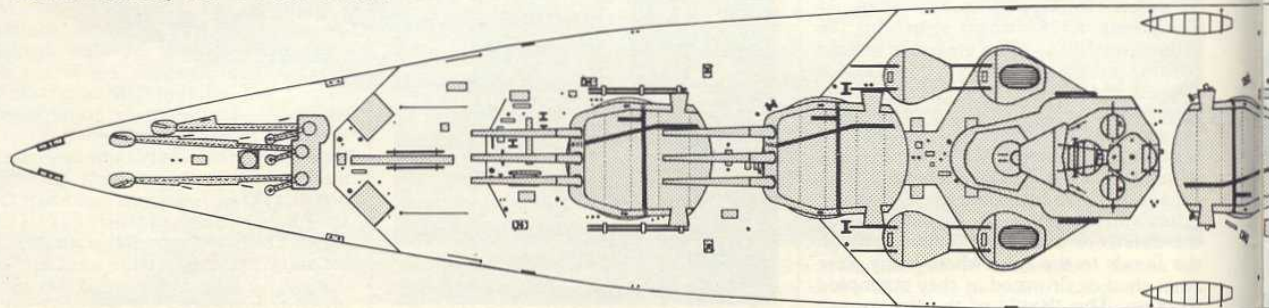
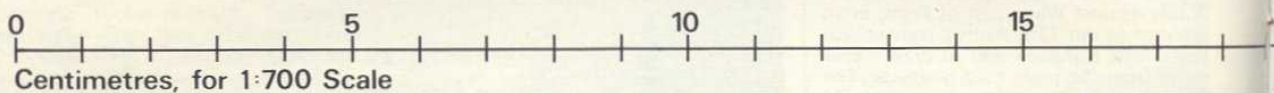
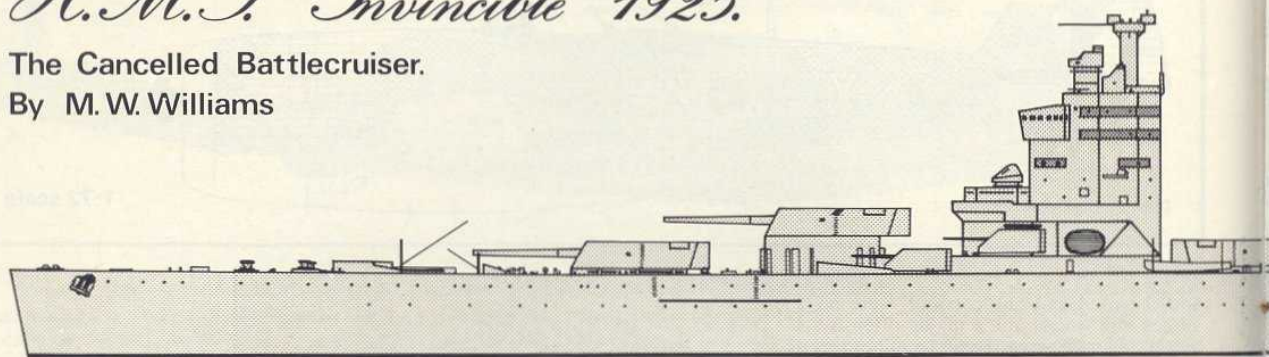


H.M.S. *Invincible* 1925.

The Cancelled Battlecruiser.

By M. W. Williams



An impression of how HMS INVINCIBLE, (the G3 design), might have looked upon completion, in

Introduction

When I bought the Tamiya HMS *Rodney* some years ago, I started off by reading through the history/instruction sheet, as all modellers will do, just to acquaint myself with the subject and the model before tackling the assembly. In the short biography of *Rodney*, it mentioned the origins of this ship as being a reduced version of a proposed battlecruiser that was cancelled after the 1921 Washington Naval Conference.

At the time I just proceeded to assemble a 'straight from the box' model. But eventually as my interest in battleships and battlecruisers grew, so did my library into this subject, and in quite a few books and articles, I again came across references to the cancelled British capital ships of the early 1920s, with detailed histories, specifications, dimensions and, perhaps the most interesting of all for modellers, proposed layout drawings.

Along with these cold facts and figures came views and opinions of the class from prominent naval writers, Dr Oscar Parkes in *British Battleships* said of them — 'They stand out as the most powerful British capital ships ever designed', Richard Hough in *Dreadnought* called them — 'The four most powerful fighting ships in British history', and then went on to say — 'fast, well-protected, immensely strong, the perfect fast battleship rather than battlecruiser'. During this reading into the subject, I also came across their proposed names. The class name ship herself would have carried one that would amply reflect all the sentiments just mentioned. She would be the HMS *Invincible*.

With such descriptions of this class, it was quite obvious that this design was considered to be a very important stage in the evolution of the British capital ship. I then decided to try and recreate an impression of this unique warship in model form. I realised straight away that given the very nature of the subject involved, all I could eventually produce would in the

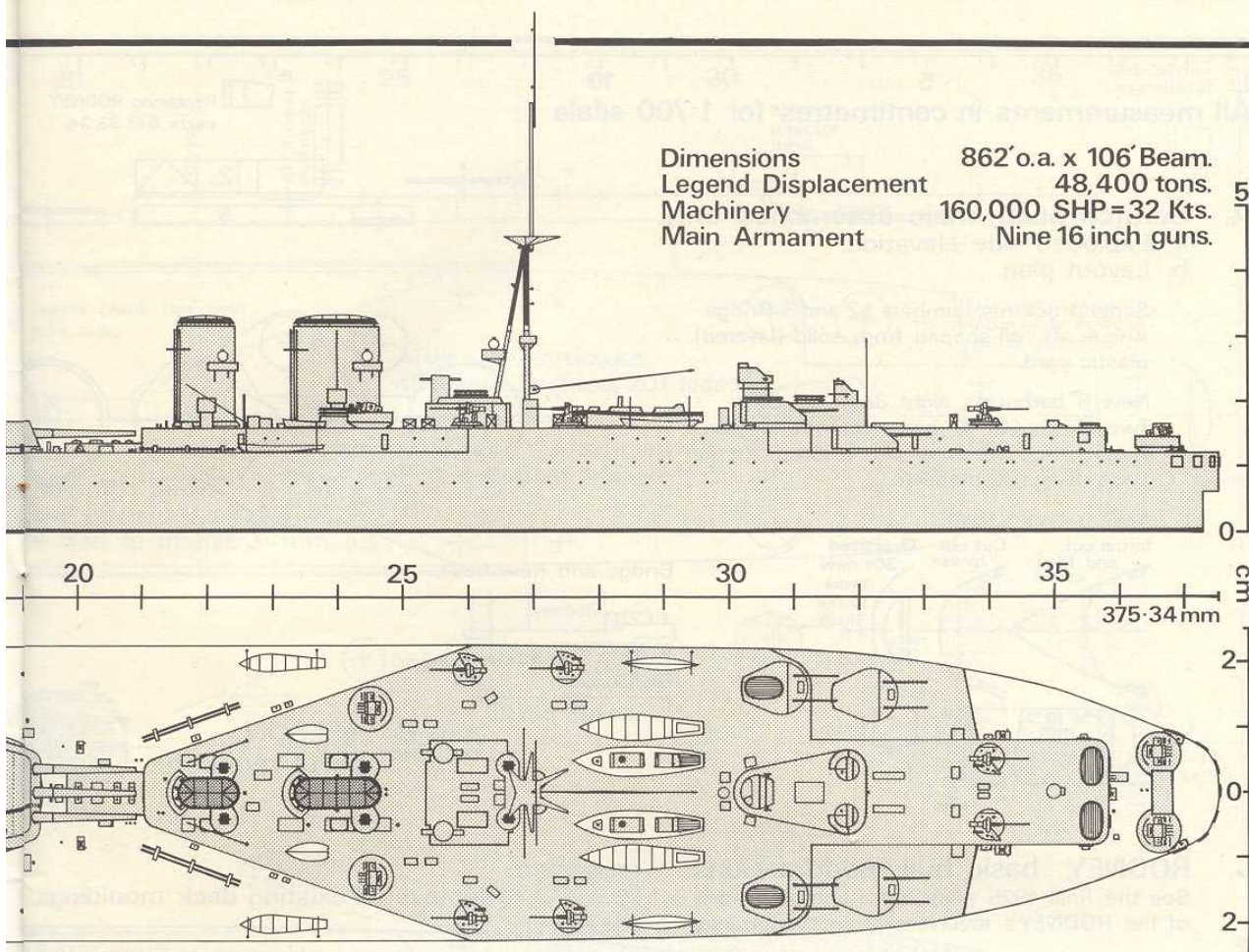
final analysis be just an impression of how the *Invincible* might have appeared upon completion around 1925.

After careful research into this project, I feel that I have captured a faithful impression of this unique ship in my layout drawings and conversion details. I hope that this investigation into the evolution and design of this particular ship, one that was never completed, appeals to those modellers who look for something different to try, or the naval enthusiast for the chance to add an example of this proposed battlecruiser to his collection, because in a gathering of 1:700 scale ships she is on a par with a *Yamato*, *Bismarck* or *Iowa* in both size and grandeur. In the final result I think I have reproduced in model form, a very suitable impression, of the many glowing comments and descriptions of this class that I read when I first started out on this project. HMS *Invincible* has finally been built.

Invincible's origins

The battlecruiser type as envisaged by its creator and champion, Admiral Sir John Fisher, was for a warship weighing as much as a battleship, with a battleship's guns, but with the speed of a cruiser. The primary roles foreseen for this new type of capital ship, were to act as a destroyer of enemy raiding armoured cruisers, which they would easily have outclassed; and to be the hard hitting spearhead of the battle fleet's reconnaissance.

The first of this new class of ship was commissioned into the Royal Navy in 1908. They were the original *Invincible* and her two sisters. In the following building programmes progressively larger and faster battlecruisers entered the fleet, the three 'Indefatigables' of a similar character to their predecessors, with a real advance in the three 'Lions' and single *Tiger*, these were the units with which the Royal Navy entered the First World War. These ten ships were the most heavily engaged British battlecruisers, and it was here that



n early 1925.

the hidden folly of the obsession for speed at the expense of reduced protection, which was inherent in their design, was brought home to the Navy in the most tragic fashion when the Grand Fleet met the German High Seas Fleet on the obscure misty afternoon of 31st May 1916, at the Battle of Jutland.

In this clash of the two mighty fleets, the Royal Navy suffered the shattering loss of three of its highly regarded battlecruisers in the most tragic swiftness, when first the *Indefatigable* then the *Queen Mary* and finally the *Invincible*, all blew up with tremendous loss of life during the course of the afternoon. The commander of the Battlecruiser Squadron, Admiral Sir David Beatty, is reported to have said, 'There is something wrong with our bloody ships today'. Indeed there was. Not only was the protection afforded to these ships poorer than their slightly slower German opposite numbers in Hipper's First Scouting Group, but the British had not yet perfected a flash proof turret/magazine installation for their ships, as the Germans had done by that fateful May afternoon.

Even after this battle the results of Admiral Fisher's designs, begun before Jutland, still entered the fleet. The two reasonably conventional 'Renowns', were followed by the ultimate freak battlecruisers *Courageous*, *Glorious* and *Furious*, which did not even have protection against enemy light cruisers. But the hard won lesson of Jutland was not lost on the Navy, and gradually the results of the experience gained by the most active battle fleet of World War I eventually resulted in what proved to be the last British battlecruiser, the mighty *Hood*.

Admiral Fisher was responsible for a great number of changes and innovations during his years at the Admiralty, not all of them proved to be the successes he had hoped, but his overwhelming desire to increase the speed of the fleet, resulted in perhaps the most successful battleship of the day.

The five 'Queen Elizabeths' were large, fast and carried eight of the new superb 15 inch guns, and their oil fired power plant drove them at a speed the first battlecruisers had achieved.

Four of these fast battleships, while attached to the hard pressed Battlecruiser Squadron at Jutland, had shown sterling service during the engagement, standing up very well under the German fire, with their thick armour, and at the same time dealing out telling punishment to the High Seas Fleet, with their massive salvos. This was surely the path along which the RN's fast capital ships had to evolve, away from the weak pure battlecruiser, to a design that had proved itself under fire, the fast battleship. Great strides forward in the fields of ship machinery and design, in general, had enabled this to become a practical proposition, when the need for a new battlecruiser was first realised by the Royal Navy after the war.

HMS *Invincible*

While Britain had been totally occupied in its fight for survival, unhindered America and Japan, had both embarked upon large naval building programmes, each to counter the others, real or imagined designs on control of the vast Pacific. They had both commissioned large 16 inch gunned battleships, which outclassed Britain's 'Queen Elizabeths', and were engaged upon the construction of more 16 inch and now 18 inch gunned battleships and battlecruisers. It was realised by the Royal Navy that if Britain wanted to maintain its premier naval position a reply to these foreign competitors was deemed necessary. The British reply was for the creation of four 18 inch battleships and four 16 inch battlecruisers, to commence.

The complicated process involved in the creation of these super ships first involved the drawing up of numerous proposed drawings and layout plans, and the original G3 (*Invincible*) design was considered on the 13.12.20. From the

0 5 10 15
 All measurements in centimetres for 1:700 scale

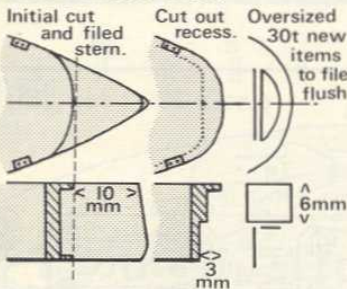
1 Replacing RODNEY parts B13, 33, 34.

A. Scratch build, main assemblies only.
 a. Exploded side elevation.
 b. Layout plan.

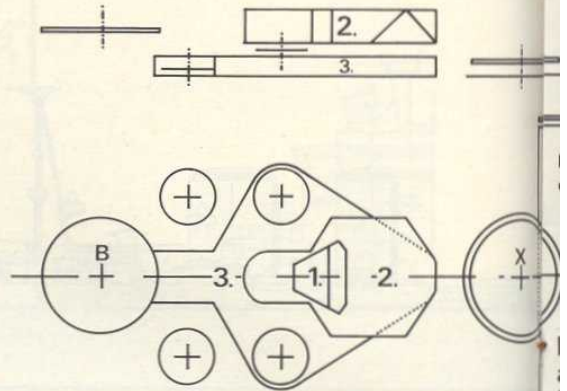
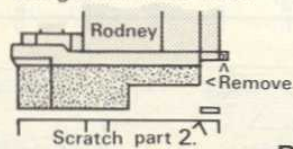
Superstructures, numbers 1, 2 and 3. Bridge. And 4. aft, all shaped from solid (layered) plastic card.

New 6" barbettes, eight 8mm dia, 30t. Two 17mm, 40t. 16" barbette, one to raise 'B' mounting. The other plus a 19mm, 10t base, forms 'X' barbette

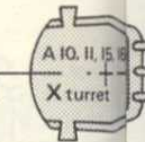
New transom stern,



Bridge and new base.

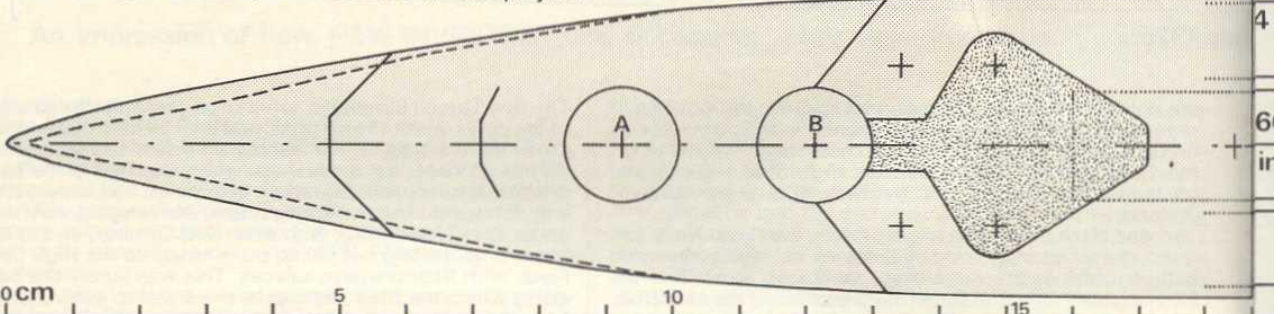


B. NELSON, parts required.



C. RODNEY, basic hull modifications.
 See the final 1925 plans, for a complete idea of the RODNEY's involvement in this project.

Remove all existing deck mouldings.



other eight proposals under consideration at this stage, she proved to be the most acceptable design, and the G3 layout was chosen to be the new battlecruiser.

Upon completion they were to be replacements for four of the older battlecruisers, and not simply additions to the fleet, and since the new centre of naval activity had shifted to the Pacific, with the rise of the American and Japanese navies, in an area with considerable British interests, it would be to this area that the new squadron would have been sent, and probably based at the expanding fleet base at Singapore as an advance unit in the role of a strong fleet in being; on the very threshold of the Pacific.

The G3 design was finally accepted on the 17.12.20, and the architects and design teams under S.V. Goodall's, direction now concentrated on perfecting the new ship's design. Alterations and improvements were carried out on paper, in the drawing offices, before all was ready for the first orders for actual work on their construction, to be placed at yards around Great Britain was authorised in late October and early November 1921. But to a world just emerging from its most horrific war, 'a war to end all wars', the thought of rearming with the obvious result of an international arms race, with its inherent dangers for world peace, and the resulting enormous financial drain on already weak economies proved to be too

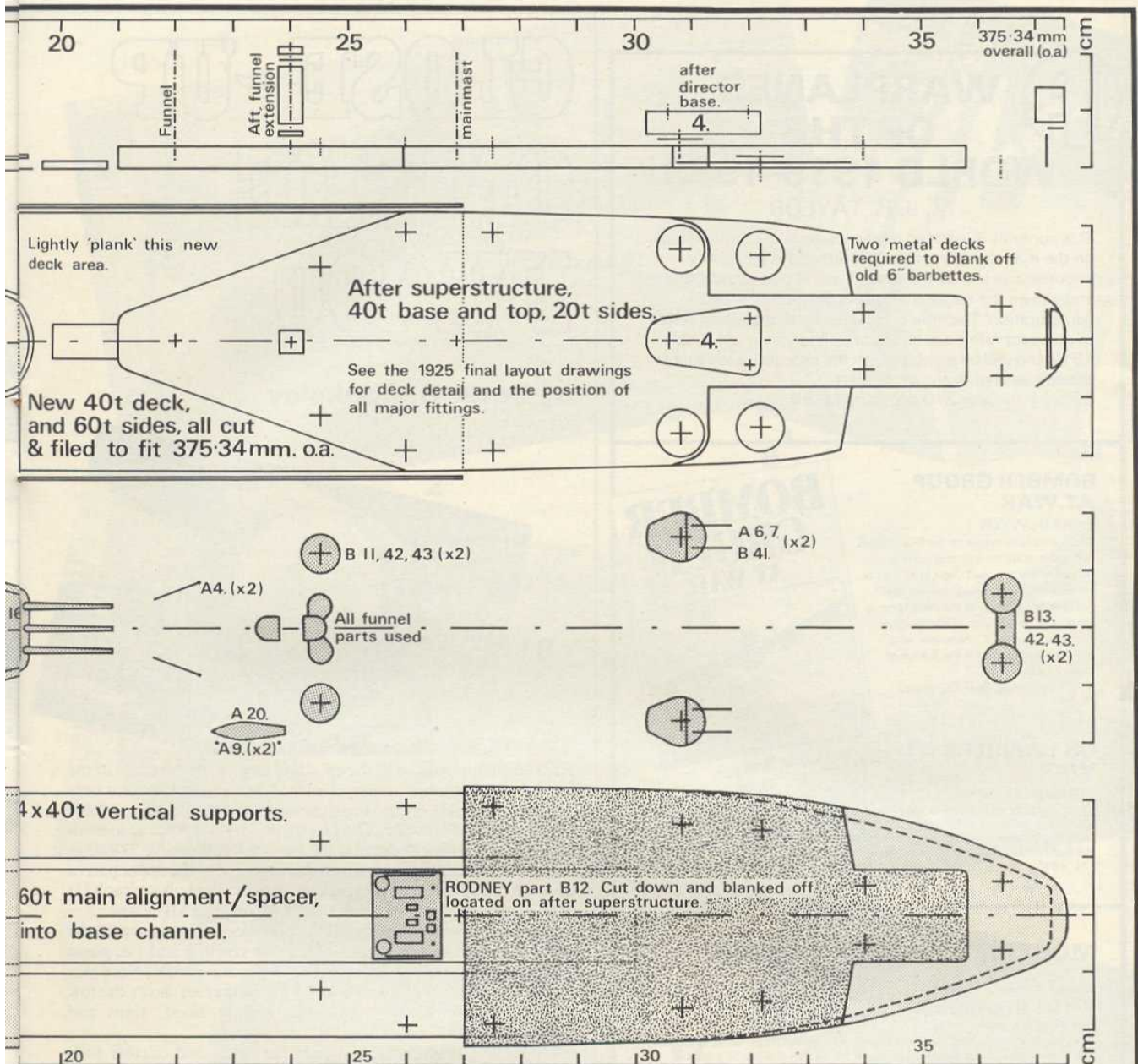
much for the leaders of the major nations involved, so the Washington Naval Disarmament Conference, was convened.

The end result was that the scratching of politicians pens, sank the entire building programmes of America, Japan and Britain. The orders for the Invincibles were first suspended on the 18.11.21, and when the full Washington agreement was signed, they were officially cancelled in February 1922. The ship on which so much time and thought had been spent, and from which so much had been expected, would never be completed.

But if this naval development had progressed unchecked, the resulting British battlecruiser would have been the most battle worthy of their kind to equip any fleet. The *Invincible* would have had a legend displacement of 48,400 tons, which rose to a massive 56,540 tons at extra deep load, with her 862 ft long hull which contained machinery of 160,000 SHP to drive her to at least 32 knots, carrying a main armament of nine 45 calibre 16 inch guns, with a crew of 1862 officers and men as a fleet flagship. She was protected by the thickest armour and internal layout subdivision, to finally deserve the name *Invincible*

The conversion

Since I believe that in conversion articles, one picture is worth



hundred words, I have tried to illustrate the requirements and basic methods I used in the building of my project, as much as possible, by dividing the assembly into three main sections: (A) Scratch built items, (B) *Nelson*, the spare parts required, and (C) *Rodney*, the basic hull modifications.

The drawings provide information on location of parts, in what I hope is an easy to follow set of plans. The main points to note, not covered in these drawings, but shown in my final layout plans, are:

- (1) The bridge; remove the lower portion of part B25, and file it flush to fit scratch built part No 2. Also fit part No 1 to replace *Rodney* parts B33 and 34, after removing the masts from the front of B30. Otherwise assemble the bridge as shown by Tamiya.
- (2) The mainmast is built up complete except, reverse part A42, and trim the bottom of A24 to sit on the shortened B12 deck house, to enable the mast to sit correctly.
- (3) Other kit parts such as the ventilators, A44, 45, 46 and B16, 17, 41 are positioned around the funnel bases, and a full set of ships boats can be obtained from the Tamiya models.
- (4) Scratch-built ready use lockers, hatches and fittings can finally give the *Invincible* that business-like deck the ship would have had, finishing it off to a standard that is present in 1:700 scale ships these days.

Humbrol Authentic Colours, HN2 dark grey and HN4 deck bleached teak covering the relevant areas shown in my final layout, are the basic colours required to complete the model. Now follow the drawings, get hold of the kits and away you go.

Source material

The single most informative source of material on the G3 *Invincible* design came from an excellent series of articles by N.J.M. Campbell, in issues 1-4 of the quarterly naval magazine, *Warship*, which dealt in great detail with the design and development of the 'Invincibles'. If you are at all interested in reading further into the evolution of the 'Invincible' class, this series will provide all the information you require.

The other main sources were — Dr Oscar Parkes, *British Battleships 1860-1950*, and Seigfried Breyer's *Battleships and Battlecruisers 1905-1970*. Both provided useful sketches of the possible layout and added interesting details about not only the 'Invincibles', but the evolution of the battlecruiser type in general.

It will be evident that by following the plans it is possible to carry out the conversion in other scales, notably 1:600 (Airfix *Nelson/Rodney* kit) and 1:1200. You'll have to measure up and work out sizes from the plans to convert to the other scales but that is about all.