

THE MODERN BATTLE TANK



Armoured Vehicles That Are Fast And Versatile

DEMONSTRATION "Argus" was recently staged at the F.V.R.D.E. (Fighting Vehicle Research and Development Establishment) near Virginia Water, under the direction of the Master-General of Ordnance, Lieutenant-General Sir John Cowley, K.B.E., C.B., A.M. Object of this impressive display was to demonstrate the most modern military equipment at present in service, or due to enter service in the immediate future, and although every branch of the British Army was

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represented at this huge exhibition, the star attraction was the latest

equipment for the Royal Armoured Corps.

Britain today possesses a series of armoured fighting vehicles which can be described as the finest in the world. They range from the speedy, elusive Mark I Ferret of only 4.1 tons to the heaviest armoured vehicle in existence — the Conqueror, a heavy gun tank of slightly in excess of 65 tons. Finally there is the latest, top-secret Chieftain, now in the advanced stages of production, and designed to equip tank formations with a versatile dual-purpose vehicle.

Let us for a little while pursue the de-



The "Centurion" — battle-tested and used by many nations throughout the world. There is a miniature of this fine tank in the Dinky Toys military series

Largest and heaviest armoured fighting vehicle used by any nation at the present time is the "Conqueror," pictured here.



The "Chieftain"—latest addition to the British family of battle tanks. All the illustrations to this article are by the author.

velopment of the major armoured fighting vehicles at present in service. The most important is the Centurion battle tank which also forms the principal heavy tank of many overseas countries including Australia, Canada, the Union of South Africa, Israel, Denmark, the Netherlands, Switzerland, Jordan, Egypt and Iraq.

By 1961 this excellent fighting vehicle had been produced in ten different marks, including the 1945-produced Mark I, mounting a 77 mm. (17 pdr.) high velocity gun; the 20 pdr. (83 mm.) Mark III which appeared in 1948, and proved so reliable during the fighting in Korea; the Mark V, also armed with the 20 pdr. high velocity gun, which made a brief appearance at Suez, and finally the latest Marks IX and X, both of which appeared during the 1959-60 period. They mount a 105 mm. gun of exceptionally high performance which is probably the most efficient gun mounted on any fighting vehicle today. This is demonstrated by the purchase of large numbers to equip the latest United States battle tank (M 60), and the new battle tank at present under development in the Federal German Republic.

In terms of fire power alone the Centurion is well equipped to engage in combat the best of any other major power. So far as defensive specifications are concerned, every precaution has been taken to provide a well-balanced and satisfactory armour, adequate for the duties expected of a medium high speed battle tank. The power unit consists of a 650 b.h.p. 12-cylinder V-type petrol engine, designed and originally manufactured by Rolls-Royce, which provides for a maximum speed of 20-22 m.p.h. The crew of four consists of Commander, Gunner and Loader, who are accommodated in the turret or fighting compartment, and the Driver, who occupies a compartment forward of the turret in the hull superstructure. In addition to the main armament, a coaxial machine-gun provides protection against infantry attack, while a second rifle-calibre machine-gun may be fitted to the Commander's cupola providing further protection

against ground or air attack.

Many new support vehicles have been fitted to the Centurion chassis. These consist of earlier marks which may become obsolete or redundant with combat units. All are designed for a specific task and will provide an entirely new generation of armoured vehicles when fitted with a redesigned and rebuilt fighting compartment.

The Centurions, named after the brave professional soldiers who invaded our island 2,000 years ago, have a fine battle record. In Korea, they fought with distinction and earned high praise from all the contingents of U.N.O. who depended on them for support.

During this period the United States Army was experiencing teething troubles with its new battle tank the M46 Patton, which mounted a slightly larger gun than the Centurion and cost more than twice as much to manufacture. About this time, says a story which originated in Korea, a section of British Centurions passed a pair of American Pattons, one disabled by a broken track and the other providing support in case of need. As the first Centurion passed, greetings were exchanged, along with an inquiry from an American crewman for a "swap".

One of the Britons humorously suggested a basis of "two for one", meaning two M46 Pattons for one Centurion. A chance encounter later in the day brought the two United Nations' tank crews into contact again and the offer of an exchange was renewed. A demonstration of the British vehicle was offered to the interested American crews, and this was eagerly accepted by all the Americans present, who drove from the British camp crammed aboard the Centurion. When an inquisitive British officer asked why there were two American tanks in camp, and why one of the Centurions had left there in the hands of U.S. troops, a nearby soldier

suggested that "an exchange had been made on a two-for-one basis".

The American troops soon returned the borrowed vehicle, but the supporters of the Centurion were quick to appreciate the prestige value of the statement, and for the remainder of the Korean campaign the official rate of exchange in friendly tanks became "two for one" in favour of the British.

A small number of Mk V Centurions' were also landed at Suez, in 1956, and served in the capable hands of the 6th Royal Tank Regiment.

The Conqueror is a 65-ton monster officially referred to as a "heavy gun tank", but although fifteen tons heavier than the Centurion, and mounting a huge 120 mm. high velocity gun in a fully enclosed turret, it is reported to operate at speeds comparable to those of the lighter vehicle. In addition, a much thicker armour basis provides a high degree of protection against the heaviest known anti-tank weapons. This is reported to reach a maximum of almost 200 mm. (approximately eight inches). In spite of this huge amount of armour protection, the Conqueror is able to keep station with lighter vehicles on account of its magnificent engine, developed by the Rolls-Royce Company, which consists of a 12-cylinder V-type petrol injection unit developing 810 b.h.p.

Although the Conqueror has never actually served under combat conditions, the most realistic tests have been simulated at the F.V.R.D.E. proving ground, and these have produced a most efficient fighting vehicle. Crew positions are almost identical to those in the Centurion, although a much roomier turret enables the Commander to sit directly behind the main armament for better observation. This also enables him to view both sides of his vehicle—a most important factor when operating against enemy infantry.

The third and last vehicle of the latest tank series is the new, Chieftain, which was the star attraction at the 1961 tank demonstration at F.V.R.D.E. A magnificent armoured (Continued on page 317)