

ORDNANCE

"Ghost Army" Victories

Army of inflated pneumatic tubes and painted fabric won victories without fighting; true nature of decoy trucks and ships undetectable within a few hundred yards.

See Front Cover

► AN AMERICAN "ghost army" that never fought but won decisive victories has been revealed by the Army. Made up not of flesh and metal, but of inflated pneumatic tubes and painted fabric, this decoy army included men who couldn't move, two-and-a-half-ton trucks weighing only 86 pounds and field artillery that couldn't shoot. The picture on the front cover of this SCIENCE NEWS LETTER shows a decoy LCT and an actual LCT.

Enemy reconnaissance many times reported large-size mechanized units which in reality were only decoys constructed to stimulate 19 different weapons and pieces of equipment used by our forces. Set up during the night by specially trained units, the true nature of these decoys was undetectable even within a few hundred yards.

Two or three men could unfold a mass of tubes and cloth from an 18-cubic-foot bundle and within ten minutes a two-and-one-half-ton truck would stand beside them. The structural system of pneumatic cloth cemented to the tubing resembled perfectly from both the air and the ground the bulk and silhouette of its prototype.

Trucks of various capacities, tanks, anti-aircraft and anti-tank guns, landing craft tanks, as well as various field artillery pieces, could be blown up with compressed air like gigantic Tony Sarg figures to represent large convoys or emplacements. An army could move to aid an endangered sector leaving behind what the enemy took to be fully equipped divisions. A weakened position was thus undetected and enemy breakthroughs were prevented.

Ten per cent of the number of men from a division were required to erect and maintain the decoys and create the appearance of normal activity. Many of the pneumatic decoys could stand ten days without repairs, but changes in temperature as well as handling methods made it necessary to keep a constant check and maintain correct pressure.

The idea for such decoys came out of the North African campaign, during which discarded barrage balloons were made into dummies to confuse the enemy. Success there made it advisable to perfect the method. The Engineer Board at Ft. Belvoir, Va., took the task in hand. By November, 1943, units were in production. Shortly after D-day completely equipped and trained forces were in action.

The problems of decoy construction were many. Proper fabrics coated with neoprene had to be developed. Four-inch-diameter tubing had to be constructed that could be bent and held in desired shapes. The decoys had to be easily erected and dismantled in the dark. They had to be of minimum bulk and weight. After extensive tests with various constructions the pneumatic construction was found more suitable.

Lace, theatrical equipment, tire and rubber companies aided in the production. The first large pneumatic decoy was an LCT. These were most effectively employed to give the enemy misleading in-

formation on ports of embarkation. Loaded with other decoys the ruse was even more successful.

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CHEMISTRY

DDT Patent Reissue Becomes Best Seller

► IT IS NOT often that the U. S. Patent Office publishes a best seller, but they got out one last week—somewhat to their embarrassment when requests for copies continued to come in and they could not supply them immediately.

The unforeseen best seller was a reissue of the American patent on DDT—officially Reissue 22,700, to Dr. Paul Mueller, assignor to J. R. Geigy, A. G., Basel, Switzerland. Dr. Mueller is the young Swiss chemist who discovered the insecticidal value of DDT, and the Geigy firm is the original manufacturer. Reissue of the patent was necessary to correct some omissions in the first U. S. patent, No. 2,329,074, issued Sept. 7, 1943.

Following the usual custom, the Patent Office ordered 400 copies of the reissue—and had orders exhausting the supply before noon on the day they were printed. A new printing has been ordered.

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Fall blooms on roses come more slowly and last longer than earlier blooms.



FOOLED THE ENEMY!—Here is a decoy LCT that misled the enemy on Allied ports of embarkation shown being assembled.