



STEVEDORE-SCIENTISTS

Members of the U. S. Antarctic Expedition led by Admiral Byrd, pause for a moment during the loading of the U. S. Coast Guard vessel "North Star" at Boston Army Base. Left to right: Murray A. Wiener, physicist; Dr. R. G. Frazer, physician of the West Base camp to be established in Antarctica; Malcolm Davis, ornithologist of the National Zoological Park, Washington, D. C., who will capture penguins and seals; and Ennis C. Helm, official photographer for Admiral Byrd.

They are stowed in the little U. S. Coast Guard ship, *North Star*, an Arctic veteran. Each item is so packaged that it can be found and unshipped in orderly and methodical manner when and where needed.

Each box, each package is labeled with a large letter in red or green paint—F for food, B for bedding, etc. with red

meaning that west base is the destination, green, east base. Not all rude discomforts for these pioneers, a stack of deluxe mattresses with innersprings claiming service to beauty are among the cargo in Army Base's warehouses at Boston, stevedored upon the staunch *North Star* by scientists and crew alike.

Science News Letter, November 11, 1939

MILITARY SCIENCE

\$100,000,000 Spent for ARP By England Since 1938 Crisis

Aimed at Relative Protection to Greatest Number Rather Than Complete Protection for Only a Few

SINCE September, 1938, when the first real war scares came, Great Britain has spent \$100,000,000 for its Air Raid Precautions (ARP). Out of this hundred million has come gas masks for the whole civilian population and tested plans for the construction of new air-raid shelters and the reconstruction of existing buildings for the same purpose.

What a city like London will be like

if German bombers are turned from truly military objectives to unrestricted bombardment of the city can be pictured from the authoritative report just completed by Maj. W. J. Quentin, Military Intelligence Reserve, U. S. Army. A civil engineer, Major Quentin has abstracted his report for Civil Engineering.

ARP, says Major Quentin, has been much criticized for its failure to develop quickly more bomb-proof shelters. Rath-

er, and rightly, it has aimed at giving relative protection to the greatest number of people rather than complete protection to only a few. It is estimated, Major Quentin says, that despite the evacuation of 1,500,000 people from London some 6,000,000 persons will still remain to carry on the city's jobs.

For strong buildings the ARP urges 4½-inch-thick slabs of concrete on the roof to check small incendiary bombs of the kind that turned Warsaw into a shambles. All other buildings with flat roofs will have them covered with three inches of sand to ward off fire risk. The top floors, it is urged too, will be cleared of all combustible materials and similarly sanded.

New buildings going up have new "demolition slabs" placed near the third floor to make heavier bombs burst there and before they reach basement air-raid shelters.

Guiding principle of new construction is that used in earthquake-proof buildings where exterior walls serve in no way in the load-bearing.

Against very heavy bombs the ARP realizes there can be little protection on direct hits. What they are aiming for is protection against the blasts and splinters from a 500-pound bomb bursting 50 feet away. It has been shown that it takes sand bags two feet thick to accomplish this.

Science News Letter, November 11, 1939

GENERAL SCIENCE

Scientists Arranging For Interchange of Journals

DETERMINED to keep the streams of knowledge flowing between America and the nations at war, American scientists and scholars are checking carefully to be sure that the interchange of journals of research interest continues.

Whenever an important journal is not received, the American Documentation Institute in Washington is to be notified. This agency, created by scientific and scholarly organizations to aid in handling joint problems concerning the literature of intellectual activities, will follow the matter with the State Department's aid, surmounting so far as possible such obstacles as interrupted transportation, embargoes and censorship.

Declaration: "The principle should be established, if possible, that the materials of research having no relation to war shall continue to pass freely, regardless of the countries of origin or destination."

Science News Letter, November 11, 1939