

bridge a number was given them, and a corresponding blank left in the map at this point.

Index of Bridges and Field Sheets.

The data taken on each bridge in the field were transferred in the office to a card index system, classified according to townships. In this way a definite and detailed record of each bridge is kept on file which it has been found greatly facilitates designing new work.

For field purposes a general tabulation sheet of each township was prepared, giving the number, type, length and height of each bridge in the township. This tabulation is printed on the reverse side of the corresponding township map using the duplex system of blue line printing. In this way there is available for field use the general dimensions and types of all bridges in the county. This feature has been found to be very convenient, especially in repair work in determining the length of piling necessary for a given bridge, or the number of floor plank needed.

Office Map

A large wall map has been prepared for office use by assembling the individual township maps on a scale of 2 in. to the mile. On this map will be shown all the waterways in the county fully developed whether bridge or not, and from it it should be possible to obtain with a fair degree of precision the drainage at any particular bridge.

The largest dock in the Mediterranean is to be constructed near Naples. According to the "Giornale d'Italia" the decree has been signed conceding to that city the right of carrying on the necessary constructional works in the harbor of Baia. Among the minor undertakings will be transformation of Lake Averno into a marine basin, with a large industrial zone adjoining the construction of an outer harbor in the Gulf of Baia and of a communicating canal between this harbor and the lake, with a quay provided with all the latest appliances. The total cost is not to exceed L.50 mil., to which the State will contribute L.22 mil. in fifty annual instalments. All the works are to be commenced at latest within six months after the declaration of peace, and to be finished within six years. After sixty years all the works are to become the property of the State without further payment.

Victory on Their Banner

What are you going to do about buying Victory Bonds? It is time you had your mind made up. For very soon the call to buy is coming. You must prepare to lend every dollar possible to your country—to help to save our soldiers' lives, to win complete Victory, to help to free the world.

Every dollar you can get together is needed. Food must be purchased. Airplanes must be built. Ships must be launched. Weapons must be forged. Shells must be manufactured. Our soldiers must be clothed and paid. To date Canada has spent \$1,000,000,000 on the war. Now more money is wanted. You must do your part in providing it. Only if you do it to the very utmost of your power will you be able to look our boys in the face, when they come home with Victory inscribed on their banners.

You can use your money to no nobler purpose. Never so long as you live will you make an investment that your heart and conscience will so much approve. Get ready to make it now. They say that money talks. Let yours talk Victory.

POSSIBILITIES OF SALVAGE AND UTILIZATION OF WASTE*

By David Currie

Director-General of National Salvage.

I THINK we have all come to realize in these days what a wasteful nation we have been—how prodigal with our resources! The reason for this is perhaps not far to seek. The bulk of the world's raw materials were at our disposal; we had the money to purchase them and the ships to bring them to our shores; it was far less trouble to use new material than to bother about the old, which was accordingly either thoughtlessly consigned to the scrap heap or ruthlessly destroyed.

We are, I think, naturally an improvident people, and we forgot the first great principle of nature—viz., that matter is indestructible and, properly manipulated, can be used again and again. We invented the word "rubbish" to describe not what was useless, but what we were too indolent to collect and prepare for further use, and thus introduced waste—a word which only has a meaning when the material wasted is of some intrinsic value. We cannot waste what is of no value, and therefore by the expression utilization of waste we mean the utilization of material which is of potential value, but which is at present being wasted either by destruction or neglect. The truth of the old saying, "Waste not, want not," is now coming home to us, and we are beginning to realize what an important part salvage can play in helping to win the war, and how still more important it will be in those anxious days of reconstruction which will follow when every scrap of raw material will be required, not only for our own needs, but for the needs of those bruised and battered countries where the monstrous ambitions of the German Apollyon have wrought such rack and ruin.

An Urgent National Need

For years and years, gentlemen, the energies of most European nations will be devoted to salvage in its widest sense, and while the wreckage and waste of war is being cleared away every scrap of material which can be salvaged will be invaluable, while in the industrial struggle which is bound to come the possession of raw material will undoubtedly prove the dominating factor. Salvage, therefore, is to us as to all other countries an urgent national need, and we must set ourselves with all our hearts and souls to master a subject which has been so carelessly—one might almost say criminally—neglected in the past.

We have only to look around us to realize at once what ample opportunities there are in every direction for organized salvage in this country, and not the least important of these directions is that in which you, gentlemen, are most interested—viz., municipal salvage. I will not stop now to inquire whether this form of salvage pays or not. I am advised that it can be made to pay, and the experience of some local authorities certainly shows that this is so; but at the moment this seems to be a question of secondary importance; and even if salvage is to be carried on at a temporary financial loss carried on it must be, for above everything else at the present time we need the commodities which can be salvaged and the tonnage which can be freed, and our necessity for these things is so great that they must be obtained even if the result should be a debit instead of a credit balance.

In the United States of America salvage is being energetically taken up by the Food Administration. The

*Address delivered at annual conference of Institute of Cleansing Superintendents.