

lists the Hamburg method for counting ova, he did not mention the Telemann method of stool examination, which is the one routinely used in the Hamburg laboratory. This method was given by Vogel in "Krankheiten und Hygiene der warmen Länder," by Ruge, Mühlens, zur Verth *et al.* (1938), an excellent treatise on tropical medicine which was reviewed in the *American Journal of Tropical Medicine*, 18: 733-34, but was not cited by Belding.

In his "Textbook of Clinical Parasitology," Belding has listed the intermediate and reservoir hosts of the animal parasites of man, but the reviewer is of the opinion that texts on human parasitology could be made clearer and more valuable if comparative material from the study of similar parasites in lower animals were included. Most of the parasites of man

can be transmitted to lower animals and probably were acquired from them. Present knowledge concerning human parasites has been obtained, in large measure, from study of the same or related species in non-human hosts. Advances in the control of yellow fever were held back for twenty-five years, until a susceptible experimental host was found in the rhesus monkey. Since the principles and methods of human and veterinary medicine are identical, and since fundamental researches on domestic and laboratory animals have afforded many of the data on which human parasitology is predicated, familiarity with these investigations should be beneficial to medical students.

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REPORTS

METALLURGICAL RESEARCH¹

DR. FRANK B. JEWETT, president of the National Academy of Sciences, announces the results of eighteen months' operation of the Metals and Minerals Advisory Committee of the academy work of the new War Metallurgy Committee.

The Metals and Minerals Advisory Committee for the past eighteen months has furnished OPM and WPB with 113 reports. Fifty-three of these were on metals substitution and conservation; 47 on ferrous minerals and ferro-alloys; 4 on tin smelting and reclamation, and 9 on non-metallic minerals.

These reports, prepared by the various subcommittees of the Advisory Committee, dealt principally with the problems arising from the necessity for allocation and substitution of materials, not only for general civilian uses, but even more particularly for War Production processes and increased production of war materials.

The work of this Advisory Committee has been greatly enlarged since Pearl Harbor and is to be still further increased as it functions with and for the new War Metallurgy Committee. Clyde Williams, director of Battelle Memorial Institute, Columbus, Ohio, and chairman of the Advisory Committee, is also chairman of the new War Metallurgy Committee which has primarily been set up to appraise and conduct needed research work—for the Army, the Navy and other governmental departments as well as industry.

It is the function of this committee to collect data and information as requested by either the War Production Board or the Office of Scientific Research and

Development, through its National Defense Research Committee, and to plan, present and supervise definite research projects for either war materials or armaments.

The War Metallurgy Committee, and its Advisory Committee is set up to function as the nerve center for all metallurgical research organizations and departments in this country—since, depending upon the problem involved, the heads of any business, university or research organization can be counted upon by this committee to make available the experience of their metallurgical scientists and engineers or their laboratory data.

Thus, this committee makes available for the Army and the Navy, through either the War Production Board or the Office of Scientific Research and Development, the services of any or all metallurgical research, personnel and facilities. There are in excess of 10,000 such individuals in this country, and their combined experience represents well over 125,000 man years.

One of the basic considerations in the operation of the committee, is that of the saving of time, the saving of mistakes and the saving of money. When the problem is proposed, through either the War Production Board or the Office of Scientific Research and Development, immediate action can be obtained by telephone communication with the leading scientists on that particular subject; initial committee meetings are often held within twenty-four hours, and, if the request is urgent, within that same day, a plan of procedure is laid down and submitted.

Every one in this country, and scientists and industrialists are no exception, is naturally anxious to contribute everything he can toward winning the war. New thoughts, new ideas, new short-cuts, are constantly coming to the front. While it is not the place

¹ Report of Louis Jordan, executive secretary of the War Metallurgy Committee of the National Research Council, Washington, D. C., June 30, 1942.

of the War Metallurgy Committee to be the repository for such suggestions and ideas, it recognizes as a very definite part of its war-time job the appraisal of such of these problems and possibilities as are referred to it by the War Production Board or the Office of Scientific Research and Development.

Another important function of the War Metallurgy Committee is to digest and make available to those properly interested through their participation in the war effort the results of both Canadian and English metallurgical research. Obviously, both Canada and England have a great many of the same problems which confront us in this country and the interchange of information, through the proper channels, makes available to all the best thinking and practice of scientists and industrialists on both sides of the Atlantic.

Typical of the problems referred to this committee is one asking for improvement in welding processes. A subcommittee was immediately appointed, which collected all available known data from universities, engineering foundations and research departments of business organizations. The Project Section of the War Metallurgy Committee worked up the research indicated, research procedure, and, with the approval of National Defense Research Committee and the Office of Scientific Research and Development, this research was placed with one of the university laboratories and compensated for on a cost basis from

funds made available by the Office of Scientific Research and Development.

The time involved in such research projects naturally varies. The report of the subcommittee, on many such projects, is made available within a matter of days, but the project itself may take anywhere from two to six months, depending upon the nature of the research.

Typical of requests for data and projects from the War Production Board is that of the effect of substitution of lead-silver for tin-lead soldering of tin cans used for food products. Since tin is the one important metal which is not found in the United States, even in low-grade ores, it is obviously important that the conservation of the present use of tin is urgent.

Since a great proportion of the total consumption of tin is used in soldering, the substitution of lead-silver for tin-lead soldering is immediately dictated, but the problems involved, in certain canning processes, are such that definite research is needed before such substitution can be ordered.

This research project was prepared through the Project Section of the War Metallurgy Committee and will be administered through its research section, the work being done in one large university research laboratory, in cooperation with the National Canners Association.

SPECIAL ARTICLES

ABSORPTION OF VARIOUS ALCOHOLIC BEVERAGES

It has long been known that different alcoholic beverages are absorbed at varying rates.¹ Haggard *et al.*² have suggested that this may be due to differing buffer capacity.

To investigate this problem, alcohol, Scotch and Bourbon whiskeys, gin and California Port and Burgundy wines were given to two subjects, the final concentration ingested being in all cases 13 per cent. alcohol by volume. The dose in the case of subject A equaled 0.95 gm of alcohol per kgm, in subject B 0.75 gm per kgm. Ingestion was completed, on an empty stomach, in 10 minutes. Venous blood was analyzed for alcohol content.³ Table 1 shows the maximum alcohol concentrations, the times these occurred and the rate of increment in the first 30 minutes.

In subject A there was a clear-cut difference between the wines and the distilled liquors, the latter

being absorbed more rapidly with attainment of a higher maximum. Subject B showed no such difference. He had a distinct aversion to the distilled liquors, resulting in mild nausea, and the explanation

TABLE 1

Subject	Beverage	Maximum Concentration	Time of maximum	Rate of increase first 30 minutes
		mgm per cent.	min.	mgm per cent. per min.
A	Scotch	162	45	5.4
	Alcohol ...	155	45	5.0
	Gin	158	45	4.1
	Bourbon ..	153	45	4.0
	Port	135	120	1.9
	Burgundy ..	120	90	1.3
B	Scotch	92	45	2.7
	Alcohol ...	90	75	2.6
	Port	106	60	2.4
	Gin	97	75	2.3
	Burgundy ..	85	60	2.0
	Bourbon ..	91	90	1.6

offered is that disturbed gastric motility interfered with their rapid absorption. That the two subjects showed no difference in normal gastric motility was demonstrated radiographically after ingestion of colloidal thorium dioxide.

¹ E. Mellanby, Nat. Res. Council (Great Britain) Special Report Series Number 31, 1919.

² H. W. Haggard, L. A. Greenberg and L. H. Cohen, *New Eng. Jour. Med.*, 219: 466, 1938.

³ H. W. Newman, *Jour. Pharmacol. and Exp. Therap.*, 56: 278, 1936.