Senator NELSON. You read from an editorial that you had written. Was that for the Journal of American Medical Association?

Dr. DAMESHEK. Oh, that last——

Senator NELSON. The first one you mentioned?

Dr. DAMESHEK. About the Far East?

Senator NELSON. Yes.

Dr. DAMESHEK. This was published in the journal "Blood."

Senator NELSON. Would you mind supplying that to us so that it can be printed at this point in the record of your testimony?

Dr. DAMESHEK. Yes. I have it here.

Senator NELSON. And then, would you supply for us the cases you just mentioned for printing in the record?

Dr. DAMESHEK. Yes.

Senator NELSON. We would appreciate it if you would give us copies of each of the reports or editorials that you refer to.

Dr. DAMESHEK. Fine. I think you have this one from "Blood," of which I——

Senator NELSON. That is attached to the back of your statement and will be printed, yes.

(The articles referred to follow:)

[Reprinted from Blood, the Journal of Hematology, vol. VII, No. 7, July 1952]

EXHIBIT A.—EDITORIAL

CHLORAMPHENICOL (CHLOROMYCETIN) AND THE BONE MARROW

New drugs, miraculous as they often appear to be initially, not infrequently have their tarnish rubbed off as we come to know them better. More often than not, this is the result of reactions of the drug upon the bone marrow and blood. Since 1931 when Kracke[1] and others suggested that agranulocytosis might be due to the administration of drugs such as aminopyrine, the medical profession has been alerted to the possibly deleterious effect of drugs containing the benzene ring, particularly when it is in combination with a nitrogen, amino, or nitrate group.

In Denmark, agranulocytosis ceased to exist for all practical purposes when a complete prohibition was placed on the import and sale of Pyramidon (aminopyrine) into that country. Later, when the first "miracle drugs" of present-day medicine, i.e., the sulfonamides were introduced, it was found that they too might result in various types of bone marrow reactions and thus in total or selective cytopenias. These reactions occurred with both the intermittent administration of the drug ("hypersensitivity?") or after long continued administration.[2] With the advent of the soil antibiotics, this particular problem appeared to be solved, and in fact, penicillin administration soon became the standard mode of therapy for agranulocytosis.

Penicillin, remarkable though it was in quelling many gram positive infections, was ineffective in controlling such diseases as tuberculosis and the gram negative infections. This resulted in a wide search throughout the world for other therapeutic molds, as a result of which streptomycin, aureomycin, terramycin and chloramphenicol (Chloromycetin) were found and developed. The latter three agents became known as the "broad spectrum" antibiotics since they prove to be active against both gram positive and gram negative bacteria, certain rickettsiae and even against some viruses. Of the group, chloramphenicol, originally derived from a soil bacterium found in Venezuela, had the simplest formula and was the only one that could be synthesized. Isolated in 1948, it was introduced into medical practice the following year.

The chemical formula of chloramphenicol is pictured (Merck Index, 1952) as:

[1] Kracke, R. R. and Parker, F. P.: J. Lab. & Clin. Med. 19: 799, 1934.
[2] Dameshek, William: Leukopenia and Agranulocytosis, New York, Oxford, 1944.