properly balanced in the sense that the advantages of the drug are proclaimed, while its limitations and side effects are minimized, or not mentioned at all, except in the package circular information required by law.

And a few pages later I will give some specific examples of this. More than this, I am concerned about the general effect which psychotropic drug advertising has on the prescribing habits of the psychiatrist and on the way he thinks about his patients.

Before elaborating these concerns I want to pay a tribute to the pharmaceutical industry. The field of psychopharmacology is only 15 years old but has already made an impressive contribution to the recovery of mentally ill people. This would, of course, never have been possible without the variety of high quality psychotropic drugs which are available, thanks to the drug industry. I hope—and I mean this very sincerely—that my testimony will help to promote further achievement and not be considered an attack or a derogation of their accomplishments.

I have divided this into three short sections dealing with the main classes of psychotropic drugs. First, the antipsychotics.

The most important psychotropic drugs are the phenothiazine chemical family, used in the treatment of schizophrenia. These are unquestionably effective and are, along with reserpine and the butyrophenones—which are two other classes of psychotropic drugs—the only treatments of proved value in this illness. There are approximately 17 phenothiazines currently manufactured, most of which are heavily promoted because the market for them is very large. Although their molecular structures differ slightly and they produce different side effects, all appear to be the same with respect to their main therapeutic action, which is to reduce schizophrenic symptoms. This has been shown in a number of studies. John Davis, in a review, summarizes this research saying: "Numerous studies showed the other phenothiazines to be approximately equal to chlorpromazine in their therapeutic effect * * *. For example, a multiple-variance analysis in the VA cooperative study showed no difference between perphenezine (Trilafon), trifluprom azine (Vesprin), prochlorperazine (Compazine), and chlorpromazine (Thorazine)."

You will notice that in order to pronounce these generic names you have to practice with pebbles in your mouth. You have had other testimony on that, so I will not comment on it further.

"The same results were found with a State hospital population, in the carefully done studies of Kurland et al."

Senator NELSON. Do these generic names sufficiently describe the drugs so that, if you didn't know the drug, you could identify what is in it?

Dr. PILLARD. The fact that they all say "zine" on the end sort of hints that they are phenothiazines. Otherwise, I think you wouldn't know. There are some—for example, the chlorpromazine indicates that there is a chlorine radical in it. The trifluprom azine is an abbreviation of the full chemical name, which is very lengthy, and it would tell a chemist a little bit about the molecular structure, but you couldn't really write out the molecule on hearing that.

Senator NELSON. When were these drugs developed.