

and be seen by it? How many are interested in scientific and mechanical progress or even the progress made in our own branch? Out of 40,000 pharmacists or over, how many are members of the A. Ph. A., of the N. A. R. D., of their own State Pharmaceutical Association? At a paper read recently at the New York State Pharmaceutical Association the figures given for attendance at State Pharmaceutical Associations throughout the entire United States, showed, if my memory serves me right, an attendance of less than 10%. What Pharmacy needs for its rank and file is not increased Pharmaceutical Education, but increased Education of the Pharmacist!

---

#### THE COMPOSITION OF BLOOD.

When Mephistopheles insists that the bond he makes with Faust be signed with blood, and remarks, "Blut ist ein ganz besondrer Saft" (Blood is an extremely peculiar juice), even Goethe, great scientist as he was, had no conception of how wonderful a fluid it is. Human blood consists of a transparent yellowish liquid called the plasma, in which float red corpuscles and at least five kinds of white corpuscles, usually called leucocytes. When the health is normal, each cubic millimeter of the blood contains about 5 million red corpuscles and 7500 leucocytes. The enormous numbers of these corpuscles, red and white, may be faintly realized when it is stated that a cubic inch is equal to nearly 16 thousand cubic millimeters. These cells are greatly changed both in number and condition by ill health. Some of the white corpuscles are called phagocytes (cells that eat) because when the blood is invaded by disease-causing (pathogenic) parasites, it is the business of the phagocytes to run them down and make a meal of them. So wonderful is the behavior of the phagocytes that one eminent scientist recently said of them, "The mononuclear and polynuclear leucocytes have qualities which it is very difficult to call anything else but consciousness." That is to say, each cell is endowed with a mind that directs its marvelous activities. But more wonderful than the corpuscles that it contains is the plasma itself. It can be so changed or modified by zymotic diseases or by certain serums or vaccines that the patient will be immune for years or even for life against a second attack from the same disease, but he will be safe from no other disease of the infectious kind unless he has been vaccinated for it with the proper serum. Blood is indeed an "extremely peculiar juice." How peculiar, who shall say?—  
*Ambition.*