

The following excellent and every-day needed articles were given the editor by Mr. F. E. Ray, of Sacramento, Cal., while at the A. P. A. meeting:

PILL EXCIPIENT.

Powdered gum arabic, pure. 8 parts.
Glycerin 10 parts.

Mix in a mortar and heat in a water bath until clear.

PASTE FOR STORK USE.

Flour. 4 ounces.
Gum arabic in powder. 1 ounce.
Glycerin 1 fl. ounce.
Salicylic acid. 60 grains.
Water 2 pints.

Mix all in a mortar, pass through a sieve, boil a few moments with constant stirring to prevent burning, avoid contact with iron. This paste will be found greatly preferable to most of those in general use.

INDELIBLE ANILIN INK

Is prepared as follows. Two solutions are prepared separately

1. Copper chloride.	8.5 gr.
sodium chloride.	10.6 gr.
Ammoniac chloride.	5.3 gr.
Water	60.0 gr.
2. Anilin chloride.	20.0 gr.
Gum.	8.0 gr.
Glycerine	10.0 gr.
Water	42.0 gr.

One part of solution 1 is mixed with four parts solution 2, when the ink is ready for use.

PHARMACY: ITS ORIGIN AND POSITION.

GRADUATING ADDRESS BY F. L. ABBEY, KANSAS STATE UNIVERSITY.

There is a widespread impression that pharmacy is a comparatively recent outgrowth of the practice of medicine, and that some time in the not distant past the physician himself prepared the medicines he administered. Some people assert that the pharmacist is not a necessary agent in the healing of disease, and will not accord him even that semi-professional position to which he lays claim. He is charged with shrouding his work in mystery by the use of complex formulae and dead languages that he may reap enormous profits and secure a monopoly of his business.

Turning to the early history of the world, we find evidence that the apothecary was then known and was held in much esteem. An Egyptian papyrus, dating back many centuries before the Christian era, contains a list of the remedies that were kept in the shops of that time. Even the Holy Scriptures mention, incidentally, the deteriorating effect of dead flies upon the ointment of the apothecary. Many of the ancient writers record the fact that man early sought relief from pain and disease by using the minerals found within the earth and the plants that grow upon it. In Arabia, as early as the twelfth century, pharmacy was regulated by law; but it was not till 200 years later that it

assumed a distinctive form in the western countries of Europe. As the East was formerly the seat of political and intellectual power, it was there also that pharmacy had its origin. As "westward the star of empire took its way," the field of pharmacy widened and brightened. As out of the crude civilization of these far-off countries arose the higher civilization of succeeding centuries, so out of the crude alchemy practised there arose the definite methods and knowledge of modern pharmacy. Its history is not that of a decade nor of a century; but it has grown with the history of the world. In the possession of the Vienna Medical Society is a copper-plate of the year 1600, A. D., representing three divisions of the healing art—medicine, surgery and pharmacy. The latter is illustrated by a shop, its windows filled with the curious vessels emblematic of the craft, and the druggist himself stands at the door receiving a prescription from the hands of a physician.

In the eighteenth century the light of investigation laid bare many of the mysteries of physical and chemical science, and one of the most earnest and successful workers in that field was Scheele, a Swedish apothecary. He was for many years a clerk, and became a proprietor by marrying the widow in whose shop he was employed. He shared with Priestly the discovery of oxygen; he discovered citric, lactic, malic and hydrocyanic acids; he discovered many tests for the detection of arsenic and its compounds; he demonstrated that steel could be successfully made; he isolated glycerin, and was the first to make many of the colours used by the painter. Though his discoveries were for many years more curious than valuable, they have been so utilized and have so many derivatives that they are considered necessities at the present time.

To Wöhler is often given the credit of laying the first stone in the great structure of organic chemistry; but long before Wöhler a German druggist discovered morphine, and from that starting point the character and composition of thousands of organic substances have been determined. From that time chemistry, with applications to various industries, has been steadily advancing, and foremost among the pioneers are men whom we are proud to claim as pharmacists.

Discovery has followed discovery so rapidly that we are no longer startled by an achievement which, if made one or two centuries ago, would have secured for its author enduring fame. The true pharmacist of the present continues the work. He analyses every new drug, and lays before mankind the finished product of his labours—it may be a new remedial agent, a pleasant vehicle, an agreeable addition to the toilet, a perfume, a dye, a paint, a food, a drink—something of value to the physician, the family or the arts.

What is the position of the pharmacist relative to the practice of medicine. The tendency of the age is toward specialties. So

much has been determined, and so many discoveries are being made in all the branches of medical science, that it is impossible for any man to attain distinction, or even to be successful, who does not concentrate all his energies upon one fixed line of action. He must have the goal in view, and press directly toward it. It is well to have a large fund of general information, and to take some interest in the pursuits of others; but he must not wander in the byways nor roam in the fields that border his path. Surgery, dentistry and pharmacy are closely connected at some points with the practice of medicine, but in their details they are far apart, and a man can no more practise all of them than he can travel several diverging roads at the same time. The reason for a division of labour between the physician and pharmacist lies, then, in the difference of their respective fields. The physician deals with the delicate machinery of the human body, its derangements and its susceptibility to treatment. He advises and prescribes; he administers a stimulant or a sedative, as the case may require; he knows when to expect a crisis and how to prepare the patient to survive it. His life is devoted to this work, and a noble work it is. The pharmacist is his faithful ally. He is familiar with the physical and chemical properties of drugs, and strives to present remedies in their most acceptable form. He discovers and prepares; the physician utilizes and administers.

There are many common examples of this mutual dependence. The musician, with skilful touch, ministers to your love for harmonious sounds. Your ear is charmed with the melody he provokes, and the finer elements in your nature thrill in unison with the sweet strains. You look with admiration upon the performer, but do you never think of the mind that designed and the hand that constructed the instrument that yields such floods of harmony? The musician may know little or nothing of the details of its construction, and the maker may not be able to render a single selection upon it; but each in his own line is proficient.

The physician is the skilled performer; the harmony he strives to produce is the perfect concord of all the vital functions of the human body. His instruments are the remedies prepared by the pharmacist. The latter is the physician's indispensable co-labourer.

How is the pharmacist related to the public? Excepting the physician, there is no one who has greater responsibilities. When your child is stricken with fever, is it not all important that the medicine shall be properly prepared? Has there been a time in your own life when you were sick nigh unto death? Who knows what would have been the result had a less skilful hand prepared your draughts? It is from necessity that physician and pharmacist are patronized; and when that necessity becomes urgent, when the life of some dear one is in danger,