picked up by the laboratory. We find many more prescriptions coming in for unusual items, sent here directly by physicians who feel that our stock is more complete than most.

And, what is more important, we have developed a sense of our own importance, the knowledge that we can stick to a job and see it through, a pride of accomplishment. Each month as we see the beautifully arranged bulletin that emerges from the mess of material we have gathered together, we feel like the proud father and mother of a new-born baby. Why don't you try it and see? The cost is insignificant; the mimeographing of the bulletin each month is \$2.25, plus about \$1.60 in stamps and envelopes, and there you have the total cost. The material is gathered merely from reading the magazines you buy anyway and from the many interesting bulletins left or mailed by the pharmaceutical houses. No additional labor cost is involved, and, what is most important, I haven't left the store and am thus on hand to give as much individual attention to the customers as they seem to need. For to-day we must do more than just hang out a shingle to get the business. We must personalize our store, and no one can do the job better than we ourselves. This is the only weapon we have to combat the many insiduous and other influences that have entered into competition, and getting the doctors who write the prescriptions to know you better, is one of the best things you can do. We are proud of our 26 consecutive issues and gloat over the fact that we have just completed editing and composing the 27th just prior to writing this paper.

MEDICAL ODDITIES.*

BY CHARLES WHITEBREAD.1

Archeology, anthropology and geology have produced facts which demonstrate that disease has existed on earth as long as organic life has been known. These sciences have revealed that the earliest record of disease—a form of parasitism represented by fossil snails feeding on crinoids, a kind of sea lily—dates back about four and a half million years according to geological calculation of time. Fossil remains of the earth's early inhabitants give evidence of disease in the form of skeletal abnormalities, such as fractures, decayed teeth and bone necroses in extinct fishes and reptiles. The tsetse fly, a carrier of African sleeping sickness, has been identified in fossil formations a million and a half years old.

When man arrived on the scene he was met by attacks of diseases just as had been the various forms of plant and animal life which had preceded him. The "Java man," with an estimated age of 500,000 years shows pathological exostoses on the thigh bone; the "Piltdown man," whose time on earth dates 100,000 years ago had an acromegalic skull; and the "Neanderthal man," who lived 75,000 years ago had rickets.

The history and scientific beginnings of medical treatment go back to the ancient Egyptians. The Smith Papyrus and the Papyrus Ebers—ancient hiero-

^{*} Presented before the Section on Historical Pharmacy, A. Ph. A., Minneapolis meeting, 1938.

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glyphic records of disease and its treatment—give us an idea of how medicine was practiced 3500 years before the beginning of the Christian Era. The love of life, the dread of pain and the fear of death prompted man to accept and adopt all things valuable in the alleviation of misery and suffering, and, in an effort to help, the best minds of each age accepted some very queer methods with which to deal with the problems of human health and disease.

In order that we may not lose track of how far the practice of Medicine and Pharmacy has advanced, it is not a bad idea to look back occasionally and give some thought to the methods of curing disease which prevailed in the past.

Among the oldest, most persistent, and most widely diffused of the means employed for the cure of disease were invocations. They were prayers for the assistance of disembodied spirits of men, mythical gods and heroes, or the Deity, and were commonly used as an accompaniment of other remedial measures. This prayer to Isis, one of the principal mythical deities of Egypt, was used while preparing medicines and before taking the same:

May Isis heal me, as she healed Horus of all the ills inflicted upon him when Set slew his father Osiris. O Isis, thou great enchantress, free me, deliver me from all evil, bad and horrible things, from the god and goddess of sickness, and from the unclean demon who presses upon me, as thou did loose and free thy son Horus.

Incantations, a mode of treatment consisting of the reciting or singing of magical words or verses, were employed by the ancient Persians and Greeks, and were transmitted by tradition down to the "folk-medicine" of the present day. Abracadabra was one of the most famous of the ancient incantations employed in medicine.

ABRACADABRA BRACADABRA	abracadabra bracadabra	
R A C A D A B R A A C A D A B R A	racadabra acadabra	
CADABRA	cadabra	
ADABRA	adabra	ABRACADABRA
DABRA	dabra	BRACADABR
ABRA	abra	RACADAB
BRA	bra	ACADA
R A	ra	CAD
A	a	A

Its mystic meaning has been the subject of much ingenious investigation, but even its derivation has not been agreed upon. In addition to being used as an incantation it was used as an amulet or charm. "Write several times on a piece of paper the word 'Abracadabra,' and repeat the words in the line below, but take away letters from the complete word and let the letters fall away one at a time in each succeeding line. Take these away ever, but keep the rest until the writing is reduced to a narrow cone. Remember to tie these papers with flax and bind them around the neck." After wearing the charm for nine days it had to be thrown over the shoulder into a stream running eastward. This incantation and charm was believed to be beneficial in treating fevers and various other diseases. The following is "A Prayer and Incantation for Visiting of Sick Folkis," used by Agnes Simpson, a famous witch of England, who was burned to death in 1590:

"All kindis of illis that euer may be, In Chrystis name I conjure ye, I conjure ye, baith mair and less, By all the virtues of the mess, And rycht sa, by the naillis sa,

That naillit Jesu, and na ma, And rycht sa by the same blude, That reiket ower the ruthful rood, Furth of the flesh and of the bane, I conjure ye in Goddis name."

Another popular incantation was one for the cure of ague. It is given below, and was to be said or canted by the eldest female of the family on St. Agnes' Eve:

Tremble and go, first day shiver and burn, Tremble and quake, second day shiver and learn, Tremble and die, third day never return.

The casting out of evil spirits by cajolery or intimidation, called exorcism, is a mode of healing the sick as old as the history of medicine. It has been practiced by the people of all ages and in all stages of civilization. It is still an authorized religious ceremony. Figure 1 pictures a mask and two noise-making rattles

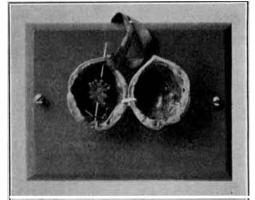


(Courtesy of the U. S. National Museum.)

Fig. 1.—Mask and rattles used in the practice of exorcism.

used by medicine men of the North American Indians to frighten away disease spirits.

All races have trusted largely to amulets and charms for the prevention and treatment of disease. They were worn to protect the wearer against real or imagined dangers—witchcraft, evil eye, sickness, accidents, etc. They were of various kinds: natural, as precious gems, stones of a peculiar shape, roots, seeds, leaves, horns, teeth and metals, and





(Courtesy of the U. S. National Museum.)

Fig. 2.—"Spider in a nutshell" amulet.

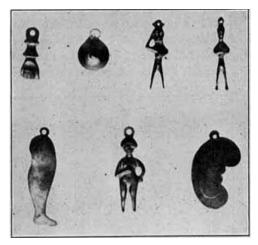
Fig. 4.—The famous vegetable lamb.

artificial, as rings, strings, beads, quotations from sacred books, etc. A rabbit's foot is believed by some to be a protection against misfortune of all kinds. A horse-chestnut (begged or stolen), if carried in the pocket, is a sure cure for rheumatism, according to the belief of many persons even at the present time. A

spider put in a nutshell, see Fig. 2, and worn around the neck, was an ancient and famous charm for the cure of ague, from the time of Dioscorides (1st century, A.D.). Its fame has descended to recent times. Longfellow mentions it in "Evangeline" as follows:

"Only beware of the fever, my friends, beware of the fever! For it is not like that of our Acadian climate, Cured by wearing a spider hung around one's neck in a nutshell!"

Images, or other natural objects, generally bearing cabalistic characters, words or signs, are called talismans. These are supposed to work wonders whether kept



(Courtesy of the U. S. National Museum.) Fig. 3.—A series of talismans.

in one's possession or not. A series of talismans still used in many countries shown in Fig. 3.

An odd belief, which was quite general, was that the Creator in supplying medicinal materials for the service of mankind had stamped on them, in many instances, an unmistakable sign of their special remedial value. Crollius, in his "Treatise of Signatures," says: "Walnuts have an entire signature of the head; the exterior rinde, or hereby encompassment, of the pericranium: wherefore salt of the rindes, for wounds of the pericranium, is a singular remedy. The interior hard rinde, or woody shell, (is a signature) of the cranium. The thin skin encompassing the kernel, (is

a signature) of the skin and membranes of the brain. The kernel hath the figure of the brain itself; therefore it is also helpful to the brain. For if the kernel beaten be moistened with the quintessence of wine, and applied to the crown of the head, it comforts the brain and head wonderfully."

A marvelous drug of European pharmacy in the 16th and 17th centuries was the vegetable lamb, also called the golden-haired dog. It was believed to be a sort of plant animal, and was supposed to spring from a seed, root in the earth like a plant, and feed upon surrounding herbs like an animal, turning upon its root until it had devoured all within reach, when it perished from starvation. As a matter of fact this wonderful drug was only the rhizome and base of the stipes of a fern. The rhizome is densely covered with soft golden-brown hairs, and with the base of the stipes for legs bears a rude resemblance to a small quadruped. Figure 4 shows a specimen of the vegetable lamb.

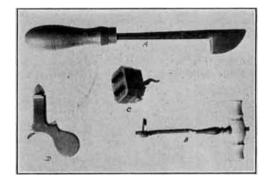
Figure 5 pictures a few of the strange instruments used by surgeons of bygone days. 5a is a cautery iron. The broad end of this instrument was brought to a red heat, and applied to a diseased part to stop a hemorrhage or to destroy tissue. 5b is a so-called tooth-pulling key formerly used for extracting teeth. The pivoted claw rested on the inside of the jaw, and a strong, quick twist was sufficient to force a tooth from its socket. 5c is a scarificator used in the operation of blood-letting. Twelve blades are set upon two rotary axes operated by a strong spring. The

blades being drawn back the instrument is set upon the skin. Now the spring is released by pressure on the trigger, and the blades shoot out making the desired shallow incisions. The next step in the operation is to apply an "exhausted cup"

and withdraw the required amount of blood. 5d, a surgical instrument known as a fleam, was used in venesection.

This account of a few of the odd things used in medicine is necessarily limited to the utmost brevity. These practices which were based on superstition, error and incomplete knowledge are being entirely replaced by scientific methods. Some of them played a part in firmly establishing the thought that "prevention" of disease is better than the "cure" of it.

In thinking of these odd things one



(Courtesy of the U. S. National Museum.)
Fig. 5.—(a) cautery iron; (b) toothpulling key;
(c) scarificator; (d) fleam for venesection.

should remember that at first all branches of medicine were practiced by a single individual. That individual, throughout the ages, stood ready to accept assistance from any source. Physicians, pharmacists and all others who take part in the practice of medicine as it is carried on to-day must continue to do the same as the practitioners of old, that is, accept facts from all sources. They must reject ideas which newly acquired knowledge has proved worthless, and apply remedies which are efficacious in the treatment of disease.

In moments of discontent, consider the practices of the past, think how far medicine has progressed, and you will then be better able to carry on with the happy thought that even in your own brief time on earth much has been done to strengthen the rational foundation on which modern medicine now rests.

PERSONAL AND NEWS ITEMS.

Mr. F. H. King, of Delphos, Ohio, has been unanimously confirmed by the State Senate for his tenth term as a member of the Ohio State Board of Pharmacy.

The Columbia University College of Pharmacy has announced a series of lectures for pharmacists on Thursday evenings of each week from February 2nd to April 20th. These lectures, while primarily intended for graduates of Schools of Pharmacy, are open to other persons who are interested and are intended to give information in respect to the newer forms of medication, and they are also intended to enable the pharmacists to answer general queries from the public and the physician.

The annual meeting of the New Hampshire Commission of Pharmacy was held in the Commission's room in the State House at Concord on December 7th.

At a meeting of the Maryland State Department of Health, recently, Dr. R. L. Swain, Deputy Food and Drug Commissioner, presented a plan to curb careless handling of industrial poisons: 1, licensing of dealers; 2, coloring of agricultural arsenates to prevent confusion with food products; 3, prohibition of the sale at retail of such poisons except in original packages.

Dr. E. N. Rothenberger has been named manager of the pharmaceutical division of Sandoz Chemical Works of New York City. He succeeds Dr. Eugene Marti who resigned after ten years of service. Dr. Rothenberger was with the Sandoz organization in Basle, Switzerland, having graduated from Basle University in 1922,