

It is contended by some that, with the bulk of this information in the U. S. P. and N. F., the student of pharmacy should not be required to purchase an additional text-book for pharmacognosy.

The trouble with the U. S. P. and N. F. as text-books is that they were never intended as such, nor are they arranged in presentable form and are pedagogically incorrect. It is like studying botany out of the dictionary. It may be all there, but—!

Again, text-books in pharmacognosy are usually complete, and describe and illustrate, as a rule, the official drugs and all those numerous and often interesting unofficials, "post officials," and therapeutic aids.

Students are all too prone to try to get along with the minimum of required information. It is often advisable to have the limits of such not too closely confined.

That the expense side of the question deserves some consideration is perhaps true. Be that as it may, the writer believes in an extra, or "additional" text-book for pharmacognosy. Its selection should be a matter of considerable concern. The U. S. P. and N. F. give no illustrations and these are of very great value in teaching this subject, particularly the microscopic side of it, and may be supplemented as much as possible. The text-book should be illustrated.

There can be no doubt that the U. S. P. and N. F. descriptions are clear cut and concise and their tests, etc., usually limited to the worthy only. These books cannot be pushed aside in pursuing pharmacognosy, but they fail to serve as teachable guides in the subject. Then let them find their true place, so far as pharmacognosy is concerned, as most excellent reference works, and not be used as exclusive text-books for that study.

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## FALLACIES IN POPULAR PSYCHOLOGY OF SALESMANSHIP.\*

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The best psychology is the exercise of courtesy, alertness and good judgment and it promises reward to the man who never forgets it.

About 100 years ago the empirical system of psychology, known as phrenology, was formulated by Gall, and developed by his followers, especially Spurzheim and Combe. Gall claimed, that with him, it was the result of a series of independent observations which he began by correlating the outward appearances and mental qualities of his schoolmates. Though Gall claimed to have originated this system, it is only a modern expansion of an old empirical philosophy and its parentage is easily traced.

The development of phrenology followed the discovery of the localization of sensory and motor functions of the body, in particular regions of the brain. Enthusiasts ignored the fact that these particular brain areas simply controlled other parts of the body as eye, ears and limbs, and jumped at the conclusion that every trait of character, every mental aptitude, every virtue, every vice, ability, interest

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and capacity each had its own pew in the brain area. An index to the destinies of men, their fitness and propensities, their appropriate choice of work and play surely had been found.

This new system of psychology did not keep the slow pace of scientific progress, nor was it directed toward further legitimate inquiry. But the prophets hastily drew minute and complicated maps of the surface of the cranium and assigned to each recognizable patch some "faculty." The brain, form of skull and physiognomy of many persons, whose mental characteristics were more or less fully known, were examined and, from these, very definite conclusions regarding the localization of particular mental faculties, were drawn. Some of Gall's earlier studies were made among low associates and in lunatic asylums, and from predominating manifestations of these subjects he mapped out areas of murder, theft, etc. These phrenologists even went so far as to say that the sizes of such areas in the brain could be determined by a study of the external configurations of the skull.

In this movement Gall and Spurzheim overestimated the significance of casual observations. They used their data uncritically and the psychological basis of their generalizations was unfounded and faulty. As a result the alleged science of phrenology is now discredited and professed to-day only by ignorant charlatans. Thus arose phrenology one of the most persistent fallacies of modern vocational analysis.

Modern psychology recognizes that the mind cannot be subdivided into any such distinct faculties as the phrenologist used, and modern neurology finds no basis for the sharply defined localization of these or any other mental functions, in the sense that a specific cortical area is the exclusive area of a particular mental element. While the application of an electric stimulus to a spot upon an exposed brain may cause the contraction of a muscle in the hand or leg, traits of character and types of ability find no such areas in the brain.

Furthermore, it has been found that these sensory-motor areas are not exclusive in their functions, but that every part of the cerebral cortex is in direct or indirect connection with every other part. It also has been found that if one of these areas for some cause is removed, that in time its function will be taken up by some other part of the brain. Such experimental evidence is certainly in opposition to such specific localizations as phrenologists make.

While the inner surface of the skull is moulded on the brain, and the outer surface of the skull approximates it, yet the parallelism is sufficiently variable to render conclusions, therefrom uncertain. Malformations often alter the skull shape considerably while it affects the relative development of the parts of the brain cortex but little. These and other reasons of like kind should lead phrenologists to be careful in predicting brain development from skull shape. Psychology, physiology and experience alike contribute to discredit the practical working of the system and to show how worthless the so-called diagnoses of character really are.

There is also the pseudo-science of physiognomy or the belief that many mental and moral characteristics betray themselves in special facial items, such as the shifting eye, heavy brow, large lips, thin lips, the shoulders, the neck, the arms, the stride, together with other such characteristics of the body as concavity or

convexity of the profile, shape of jaw, skin texture, color of hair and eyes, etc. So in reading character practitioners no longer depend upon cranial geography alone but resort to this confused mass of fact and fancy.

We are therefore led to make the following statements to show why the so-called science of phrenology and physiognomy are unscientific and unsound and afford no reliable means of analyzing character:

1. Anatomically the brain cannot be divided into such areas each with a special function as was done by Gall and Spurzheim.

2. Our feelings, emotions, impulses, etc., are not governed by local cortical areas as these phrenologists argued.

3. "That by cranial measurements alone it is impossible to determine with certainty the race, age or sex of an individual or even indeed whether he was a prehistoric savage, an idiot, or a gorilla."

4. That the shape and thickness of the skull bones gives little indication as to whether brain tissue or supporting tissue lies beneath a protuberance or depression.

5. That sparse and casual observations of striking cases are not sufficient grounds for generalizations.

Despite the fact that these so-called scientific methods of character reading have been discredited, there is a great flood of just this kind of unscientific and worthless material to be found in many of the popular books upon the subject of salesmanship. The subject matter is usually presented under such attractive titles as "human nature," "analyzing the customer," "character analysis," "psychology of salesmanship," and other titles of a similar nature.

One of these books says that scientists divide individuals into three general types—the motive, the vital and the mental types. Persons of the motive type are described as having "oblong faces, high cheek bones, large bones and bodies showing a tendency towards angularity." "Such people do not want to be troubled with details." "Salespersons waiting upon them must keep themselves keyed to a high degree of nervous tension." "Rapid action is what is called for, and arguments must be used which give not only the practical uses of goods but those qualities which guarantee service." "The name vital is given to the second type because of the preponderance of vital or nutritive organs." "Customers of this type are impulsive, enthusiastic, cheerful and lovers of fresh air and exercise, but frequently are very changeable and fickle. Salespersons can easily lead them." The mental type derives its name from the great activity of the brain and nervous system. The head is relatively large as compared with the body. The face is oval, with a high broad forehead." "Customers of this type think quickly. They possess refined feelings, have excellent tastes and possess great love for the beautiful." "With customers of this type the requisites are for the salespersons to know their goods thoroughly, and be able to express their selling points in correct and forcible English."

The same author goes on to say that "the types are found in many combinations. It is a rarity to see a person showing the marked characteristics of one type to the exclusion of the other two. The great majority of people have marks of each, with a preponderance of one over the others." Another author says that a salesperson should be able to determine the preponderating characteristics of

any particular temperament in any individual at a glance, and in almost the same paragraph says that there are nearly as many temperaments as there are persons, that each one has some modification, or a temperament of his own.

In another one of these works the face is analyzed in about the following way as to shape: a square face ordinarily indicates firmness; an oval face indicates imagination, flexibility; an oblong face indicates melancholia, weakness; a round face indicates a person of sensuous or animal nature. In a like manner the chin was analyzed: the pointed chin indicates acuteness or craftiness; the round chin, benevolence; the angular chin, firmness; the small chin, timidity; a flat chin, a cold disposition. The eyes, the eyebrows, the nose, the mouth, the hands, the hair and skin are in like manner commonly analyzed. Not only are such generalizations worthless and useless, but they are so general within themselves that their value is lost if they ever had any.

Page after page of this fallacious so-called psychological material could be cited and it would all be of the same kind and character. We have already pointed out the fallacy of trying to judge the mind of man by means of phrenology and physiognomy, yet this same lot of material appears and reappears, with little change, in book after book upon the market to-day. There is no scientific test by which a man's moral or mental qualities can be determined. We cannot directly observe what is going on in the mind of another. The mental processes of another can only be inferred from his acts, his looks or his words; even then we get lost in a great crowd of exceptions.

We are therefore forced to admit that the formulated facts of physiognomy are unsupported, contradictory and extravagant and do not warrant our consideration. If we are willing to base our expectations of human conduct upon physiognomy we must prepare to meet delightful as well as fearful surprises. This is quite in opposition to the effort to make character reading an exact science. In salesmanship individuals cannot be handled upon the basis of a common psychology, for there are nearly as many variations as there are individuals. Moreover, recent researches show that a large part of our facial expressions are acquired by unconscious imitation of those of others, which is in opposition to the theory of the correlation between mental faculties and facial expression.

Schneider attempted to verify the principles of physiognomy by actual tests. He selected a group of money-making executives and charted their characters according to phrenology. He found that the men who had the characteristics of good executives were anything else than good executives. A number of these tests gave negative results and he was forced to conclude that physiognomy was not a reliable way of judging ability of men. The mere facts of physical structure, contour, shape, texture, proportion, color, and the like, yield no more information concerning capacity interests of persons than did the old incantations of the primitive medicine man or the absurd chart of the phrenologist.

In the light of modern knowledge, phrenology, as well as physiognomy, is bad psychology and is bad neurology. Modern psychology does not regard the mind as a bundle of faculties, and therefore it cannot be mapped out into 32 or 42 odd areas that correspond with such "affective propensities" as amateness, combativeness, and constructiveness or with such sentiments as self-esteem, benevolence, hope and wit. "Phrenology then, as practised, may be classed with the other

quack sciences such as astrology, palmistry and physiognomy," none of which are worthy of being mentioned, and much less associated, with psychology.

What then can we say about psychology of salesmanship? The soldier can use the same weapon upon every enemy but the personal element that comes in between customer and clerk destroys the use of any such mechanistic procedure. While sales processes cannot be reduced to any set lines of action, we believe, however, that there is a real good sound psychology, possibly better understood as good business courtesy, tact and judgment, which every salesman must exercise if he wishes to be successful. That is the ability to so atune himself with every customer, finding a common level somehow, so that the customer at least feels satisfied with the salesman's services. There is no prescribed way of doing this. Each customer is an individual and must be dealt with as such. A customer does not come into a store for phrenological or physiognomical analysis, which no salesman is able to give and which would be useless if he could. Neither does a customer wish to be viewed with a "hawklike" eye nor does he care for any contortionistic poses in an effort to present goods or packages at certain angles. The best psychology is the exercise of courtesy, alertness and good judgment and it promises reward to the man who never forgets it.

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#### DR. FRANK CRANE'S COMMANDMENTS OF SALESMANSHIP.

1. Be Agreeable.—Other things being equal, I go to the store where the clerks try to please me. I buy clothing, typewriters and automobiles of the man who acts as though he likes me. Exert yourself to make a pleasing impression on me, please. I appreciate it. Hence, dress well. Untidy clothes mean you don't care what I think of your appearance. But don't dress too well. That gives you an air of showing off. Dress just right. If you don't know how, find out. Cultivate a pleasing voice. Learn to converse entertainingly. Cut out all mannerisms. Give me the impression of a gentleman, honest, square, anxious to please, and good-natured.

2. Know Your Goods.—Don't let there be any question I can ask you relative to the manufacture, history, distribution, or uses of what you have to sell that you cannot answer. If you are selling typewriters, know all about all the kinds. If you're selling coffee, find out all about where all sorts of coffee come from, and all the points about them. Put in your spare time making of yourself an encyclopedia of information about your goods.