

will be developed in your profession a strong desire to see things move forward and upward and nobody will profit by this more than the pharmacists themselves.

I will say, in closing, that my remarks have not been made in any sense of depreciation or criticism. I understand quite well that you have puzzling problems. The pharmacists of Indiana are a loyal and competent body of men, but just in proportion as they are such they should have the ambition and desire to see their profession and its place in our State stand out more prominently and more effectively as compared with other states. When you begin to take collective pride in your profession as such, then will be the dawn of growth and development.

PHARMACY AS A HOBBY AS WELL AS AN INTEREST.*

BY CHARLES H. LAWALL.

When Bryant said, "To him who in the love of nature holds communion with her visible forms she speaks a various language," he uttered a truth which has many applications, not the least of which is, Pharmacy.

Substituting the word Pharmacy for the word Nature, in the foregoing quotation, gives a clue to the real reason why Pharmacy holds its own in spite of commercialism and other handicaps.

There are various motives which impel a man to choose a profession; one, and probably the strongest one, is self-interest. This frequently changes in later life to a realization of opportunity for service and a desire to be helpful to one's fellow-man, motives, which, as a rule, have no place in the make-up of a young man.

By far the strongest and most valuable motive, from the standpoint of the development and progress of any profession, is the one which has to do with the desire for mental development through the acquisition of knowledge.

The answer to the eternal "Why?" has been sought by individuals in all ages and out of this quest has arisen all that we prize in the shape of knowledge. Those who have contributed most largely to the progress of the past are not necessarily the ones who stand out like beacon lights as having enunciated important axioms, or laws, or discovered valuable elements, but the real credit belongs to the silent, patient, plodding workers, who investigate from sheer love of the work and who, little caring whether results have any practical value at the time, store up the material which genius later arranges into that classified coherence which men call Science.

Much of the pioneer work of this kind in Chemistry and Medicine has been done by pharmacists, whose successors too frequently see themselves frowned upon and discredited by members of both the sister professions which have been founded and developed through her help.

Much has been written regarding these matters in order to bring pharmacists to a realization of their neglected opportunities. It is doubtful whether any change has been, or could be, effected in the habits of work and of thought of older pharmacists. It is the younger members of the profession with whom the hope of advancement lies, and the responsibility for their guidance is largely in the

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hands of the Colleges, for there no longer exists the preceptor of by-gone days who guided the neophyte for a period of three years or more. His disappearance is keenly felt.

One who has his mind so set upon the commercial side of Pharmacy as to be oblivious of its history, tradition and possibilities, is not to be swayed by, nor perhaps even interested in, the following, but it is hoped that it will be read by some of the younger generation and that some will be stimulated thereby to select and encourage such applicants for entrance into Pharmacy as betray an interest in the romance and sentiment which are so closely interwoven in its scientific possibilities.

Let us take a brief survey of some of the substances of which medicines are made, which the pharmacist has more or less frequently to handle.

The tales of adventure, of conquest, of romance, the experiences of intrepid explorers, of pioneers and colonizers of lands newly discovered, of fortunes gained and lost, of mystery, superstition and witchcraft, of comedy and of tragedy, which are associated with even some of our commonest drugs, would make even a reader who read only for entertainment and stimulation, not for improvement, forsake the most daring writers of fiction.

From the Babylonians, that ancient race of mystery and culture, come the names of some of our most important metals, named by them on account of their fancied association with, or influence derived from, the better known heavenly bodies. Most of these names are only encountered in little-used synonyms; as *crocus Martis* for ferric oxide; *saccharum Saturni* for sugar of lead; Lunar caustic for silver nitrate; but it is interesting to note that the planetary name Mercury still persists for this most commonly used name of one of our metals, whose compounds are of medicinal importance and value.

Passing along the shelves of any Pharmacy and picking out at random from the titles those of more than passing interest, we find one of our best known cosmetic creams, the ointment of Rosewater or Cold Cream, credited, as to its origin, to Galen, one of the fathers of Pharmacy, who lived at about the beginning of the Christian Era, and for centuries this preparation was called *Ceratum Galeni*.

Galen's influence upon Pharmacy and Medicine was greater than that of any other single human being who ever lived, or probably ever will live. His teachings held almost undisputed sway for more than 1500 years, during part of which time, in some parts of the world, pharmacists and physicians were required to pledge themselves to follow his teachings and practice blindly and implicitly.

The names of many others of the preparations and substances used in Pharmacy are of interest in their origin and development. *Hiera Picra* means "sacred bitters," evidencing the esteem in which it was once held. *Sal Ammoniac* derives its name from the fact that it was found in the sands of the Lybian Desert near the temple of Jupiter Ammon, resulting from the decomposition of camel urine due to the many caravans which stopped at that point. The influence of the Arabians upon Pharmacy may be traced through the nomenclature; the words beginning with *al* (and sometimes *el*) being of Arabic origin, as alkali, elixir, alcohol, etc. In the case of the name Alcohol the Arabic word means finely divided and was first applied to easily diffusible volatile liquids and finally to the specific substance alcohol.

It is of interest to note that this earlier and original meaning persists in the title "alcoholized iron," a form of metallic iron resembling reduced iron but prepared by mechanical and not by chemical methods; the word "alcoholized" in this title signifying simply, "finely divided," and having no reference whatever to alcohol, as is mistakenly supposed by many who have handled and used it.

The Latin title *Spiritus Vini Rectificatus*, so long used for alcohol, reminds us of the original source of the alcohol of commerce, which was wine. This title, still found on older shop furniture, is not correct as applied to modern alcohol, which is the product of fermentation of any saccharine material. That the abbreviation *S. V. R.*, which was frequently employed in former times, in hastily written prescriptions, to designate this substance, is no longer intelligible, was lately instanced by a student who rendered it, in answer to an examination question "Service very rapid."

Phosphorus (light bearer), corrupted into "foxfire" by country people who see the gleam of phosphorescent decayed wood in a forest on a dark night; Antimony (against monks); Vitriol (glass like); *Sal aeratus* (gas or air producing salt); each of these names alone might furnish material for an article, yet we use them without a thought of their underlying interest and origin.

Of the many synonyms of Compound Tincture of Benzoin, which have accumulated during the centuries in which it was esteemed and used as a vulnerary, Jesuits drops and Friars balsam give it a religious association which is distinctly different from the martial thoughts called up by Balsam of Maltha, although the Knights of Malta probably used it in the crusades.

Our common substance Sodium Sulphate, now almost exclusively used in veterinary practice, was discovered in the waters of a European spring by Glauber, a German chemist, whose name appears in its synonym (Glauber's Salt) and so highly was it esteemed as a remedy in the early years of its use that it was called "Sal Mirabile," or the admirable salt.

Red Oxide of Mercury (erroneously called Red Precipitate, for it is not made by precipitation) conjures up visions of Priestley working in his home in the Susquehanna Valley with the crude apparatus which he fashioned from glass bottles, kitchen utensils and an old gun barrel, for it was from this substance that oxygen was first evolved by him in amounts sufficient to identify it and study its properties.

Morphine brings to mind Sertürner in his little apothecary shop in Eimbeck, Germany, competing, all unawares, with the French pharmacist Derosne for the honor of discovering the first alkaloid, Morphine (called then vegetable alkali).

When we come to the drugs of vegetable origin we find the greatest opportunity for memory and imagination to run riot as our eyes glance over the list; Opium bringing to mind early morning in dew-kissed fields of snow-white blooms and nodding fruits and of the care that must be taken in incising the outer surface of the capsule so as not to lose the drop or two of milky juice that subsequently hardens and becomes what was formerly called meconium, now the opium of Medicine and Pharmacy; Conium with its mousey odor, reminding us of the death of Socrates and, through that association of ideas, of Plato and the other Greek philosophers who enriched our minds and thoughts for all time with their speculations and maxims.

Myrrh, Frankincense, Cinnamon, Cloves, Nutmegs, and their like; what thoughts of caravans plodding across sandy wastes; of odorous Eastern isles; of fleets of galleys and later of sailing ships, are brought to memory. The trade in spices and precious gums and balsams has been responsible for the establishment of kingdoms and republics of olden times and of commercial rivalries more fiercely waged than any of modern times, resulting in the overthrow of dynasties and in repeated changes in the world's map, and this chapter alone is well worth perusal. How many who handle and use nutmegs, with their white powdery coating of chalk, know that this coating is now a meaningless custom dating from the days when the Dutch, who controlled the Spice Islands, dipped the nutmegs in milk of lime to prevent their germination, thus assuring a monopoly in their growth and sale for centuries?

It is to the new world that we must turn, however, for some of our most interesting drug histories:

Cinchona, a drug of mysterious origin as to the discovery of its properties, for it is not to-day, nor has it ever been, used as a medicine by the natives of the Andean Slopes where it is indigenous.

Ipecac used as a secret remedy for dysentery by a celebrated European physician, whose successes were so great that a French monarch paid him a handsome sum to divulge the name and origin of the remedy.

Sarsaparilla, once vaunted to the skies as a remedy in many chronic affections, masquerading for years under false colors as to its real value, for both its alleged therapeutic properties and its flavor were due to other drugs used in its combinations, now almost entirely discredited as a remedy of any value.

Hydrastis and Sanguinaria, the yellow and red "Puccoon" of the aboriginal American who used them for pigments as well as for their medicinal value.

Boneset, Tansy, Pennyroyal, Hoarhound; all of these conjure up visions of old-fashioned attics with bunches of dried herbs suspended from the rafters.

Fucus and Chondrus bring with them the tang of the sea and of rockbound weed-strewn coasts where surging billows warn the mariner that Poseidon never sleeps.

With these thoughts singing through one's mind, how can anyone say that Pharmacy is decadent, or that it holds no interest for its devotees? There is much and great work yet to be done and discoveries will yet be made bringing to their authors fame and possibly fortune.

Each day's work becomes a miracle to him who looks with seeing eyes into the graduate or mortar, test tube or flask, and to him who with interested mind draws near to Nature's manifestations of her innumerable laws, immutable and sometimes inexplicable. Who is there that has not time to add his quota to the knowledge of his time and of his calling, be it ever so little? Each day some new fact may be learned and recorded; untrodden paths of experimentation lie waiting for generations of pharmacists yet to come. Shall we now pass them by and leave to those of the future our responsibilities in the present?

The studying of colloids, of the sera and vaccines with their fascinating theories and illimitable possibilities; these are subjects in which any pharmacist of the present generation may be as well posted as the foremost savant of the time, for they are of such recent development that one may easily start at the beginning.

If Pharmacy sleeps, and is not yet aroused to her possibilities, it is time for her to awake, and this awakening will come, when it does come, through a realization of the infinitely interesting possibilities for development along lines of combined scientific and practical value. Let us all join hands in building more strongly for the future, by inculcating in our younger workers that abiding love for and interest in Pharmacy which shall outlast all ephemeral considerations of expediency and commercialism, except as absolute necessities. Pharmacy as a hobby adds to the happiness of the individual and can be turned to profit.

OF THE ITINERANT PHYSICIAN AND THE DIVERS MEDICINES
THAT HE CRIED IN THE STREET.*

(From the Hebrew of Rabbi Judah Alcharisi (1165-1225).)

BY SOLOMON SOLIS COHEN, M.D.

Saith Heman the Ezrachite:

Once I journeyed from the brook Arnon to Ba'al Gad, which is in the Valley of Lebanon, and whilst I was strolling through the open places of the city, thinking to gather from the tongues of its sages pearls of discourse, I saw a great concourse of people running and gathering from every highway and byway, and they formed a ring.

And I saw in the midst of the crowd an old man, bent like a reed, and round about him the great throng was standing.

And he stood by the gate of the market place and before him were heaped up row upon row of jars and phials filled with divers medicines—elixirs and unguents and confections. Also were piled before him great stores of plaisters and bandages and lotions, and beside him were iron vessels and forceps and a three-tined flesh-hook, and instruments for bloodletting and for cauterizing, and blades for the cutting of flesh, sharp as a two-edged sword.

And he cried aloud to all that stood before him. And thus he spake:

“Hear me, ye peoples, and give ear unto me, O ye multitude of nations. I am he that cometh from the affrays of fate, that hath escaped from fearsome perils, from howling tempests and from raging waters. Over me have passed numberless dangers. Mine eyes have beheld wonders and mine ears have heard great and marvelous sayings.

“From the land of Elam did I set out aforetime and hither and thither have I journeyed, to and fro the ends of the earth, seeking out all the great sages of the world. Thus have I learned science from the mightiest of physicians. I have poured water over the hands of the wisest of the wise, and ever thirstily did I drink in their words. Mine instruction have I received from their living lips, not from their lifeless books. So have I attained unto their most cherished secrets and all their wisdom hath been revealed unto me.

“And now, with the help of God, I can heal wounds, I can repair breaches, I can bind sores, I can relieve distress; yea healing is to be found with me for every pain and burning that affects the body, and for the bites of vipers and wild beasts. In mine hand is a plaister for every fresh bruise and if a man hath been bitten by

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