

"Gmelins Bile Reaction" was first published in his work "Verdauung nach Versuchen," vol. I, page 80. This reaction consists in the slow oxidation of Bilirubin to Biliverdin, therefore the green color.

CONCLUSION.

This story of the Gmelin Family, whose cradle stood in an apothecary shop, and the members of which family were pharmacists, chemists, botanists, physicians, naturalists and even lawyers with a world-wide reputation, should be of interest to every pharmacist who truly loves his profession. All those desiring further information, I beg to refer to the book "Stammbau der Familie Gmelin," Karlsruhe, 1877, which book, however, was not at my command, so I was forced to compile my information from many other sources.¹

In conclusion, let me express three hopes:

1. Let me hope that this story of the Gmelin Family and their genealogy will clear up the existing confusion in the names of members of the Family especially as to Christian Gottlob and *not* Gottlieb (1792-1860), of Ultramarine fame.

2. That it will instil into the average pharmacist, young and old, more love for his profession. Let the Gmelin Family show him what has been done and what can be done to create professional pharmacy.

3. That the story will prove to some pharmacists what an interesting, what a fascinating subject History of Pharmacy is. Let the Gmelin Family be followed by biographies or collections of biographies of other families of pharmacists.

THE APOTHECARY IN LITERATURE.

BY EDWARD KREMERS.

NO. 37. TOM, THE "DOCTOR'S" APPRENTICE.*

At the Baltimore meeting of the A.A.A.S. in 1908, Professor Hynson conducted several of the attending pharmacists to a restaurant for luncheon. The writer had the pleasure of sitting next to the genial Baltimorean who, judging by the number of fellow citizens who greeted him, was a popular man. Almost invariably he was addressed as "doctor." After this had happened a number of times, he turned to the writer, saying: "Now you see why I want pharmaceutical graduates to be given the doctor's degree." I had been opposed to granting the pharmaceutical graduate a doctor's degree unless he met the requirements usually demanded for the Ph.D. at our best universities. Professor Hynson had advocated the granting of the degree of Doctor of Pharmacy with much lower standards. No doubt, he had been driven, as it were, to this position by the almost universal practice in the south of calling the druggist by the title doctor, as in Kentucky everyone who once shouldered a musket is honored with the title of colonel. As a self-respecting man he did not want to be called "doctor" by his friends unless that degree had been

¹ An addition to this was published in 1922 by a descendant, Otto Gmelin, a well-known publisher of medical works, in Munich "Stammbau der Familie Gmelin, Jüngere Tübinger Linie," by Dekan Eduard Gmelin, which is also illustrated.

* Section on Historical Pharmacy, A. Ph. A., Rapid City meeting, 1929.

awarded by some college. As to the educational standard of the doctor's degree thus conferred he was not so particular, though possibly as high-minded as many a recipient of the M.D. from a medical college a generation ago.

Dr. Tadpole of Captain Marryat's "Poor Jack" seems to have been a druggist surgeon, keeping open shop in Greenwich. We are told nothing directly about his educational and professional qualifications, but indirectly we may infer something about them from remarks made by his apprentice, Tom, who later desires to replace him. "Doctors" with even less claim to the title have not been uncommon in this country.

We are introduced to Dr. Tadpole and his apprentice after Jack's father had administered a sound thrashing to his wife with his "tail," of which the sailor was very fond and which his loving spouse had cut off during his sleep after a night with a bottle. Before leaving his wife, feigning death, the conscience-stricken sailor and husband admonished his son to call the "doctor."

There was a doctor who lived half way up Church Street, a short distance from Fisher's Alley. He was a little man with a large head sunk down between two broad shoulders. His eyes were small and twinkling, his nose snubbed, his pate nearly bald; but on the sides of his head the hair was long and flowing. But if his shoulders were broad, the rest of his body was not in the same proportion—for he narrowed as he descended, his hips being very small, and his legs as thin as those of a goat. His real name was Todpoole, but the people invariably called him Tadpole, and he certainly in appearance somewhat reminded you of one. He was a facetious little fellow, and, it was said, very clever in his profession.

"Dr. Tadpole," cried I, out of breath with running, "come quick, my mother is very bad, indeed."

"What's the matter?" said he, peering over a mortar in which he was rubbing up something with the pestle. "External or internal?"

Although I did not know what he meant, I replied, "Both, doctor, and a great deal more, besides."

"That's bad, indeed," replied Tadpole, still rubbing away.

"But you must come directly," cried I. "Come along—quick!"

"*Festina lente*, good boy—that's Latin for hat and boots. Tom, are my boots clean?"

"Ye'es, sir," replied a carrotty-haired boy, whom I knew well.

The doctor laid down his pestle, and taking his seat on a chair, began very leisurely to pull on his boots, while I stamped with impatience.

"Now, do be quick, doctor, my mother will be dead."

"Jack," said the doctor, grinning, as he pulled on his second boot, "people don't die so quick before the doctor comes—it's always afterward; however, I'm glad to see you are so fond of your mother. Tom, is my hat brushed?"

"Ye'es, sir," replied Tom, bringing the doctor's hat.

"Now then, Jack, I'm all ready. Tom, mind the shop, and don't eat the stick-liquorice—d'ye hear?"

"Ye'es, sir," said Tom, with a grin from ear to ear.

The doctor followed me very quick, for he thought from my impatience that something serious must be the matter. He walked up to my mother's room, and I hastened to open the door; when, to my surprise, I found my mother standing before the glass arranging her hair.

"Well!" exclaimed my mother, "this is very pretty behavior—forcing your way into a lady's room."

The doctor stared and so did I. At last I exclaimed, "Well! father thought he'd killed her."

"Yes," cried my mother, "and he's gone away with it on his conscience, that's some comfort. He won't come back in a hurry; he thinks he has committed murder, the unfeeling brute! Well, I've had my revenge."

A more detailed description of the "doctor" and his "shop" we are giving in a later chapter.

When I left Greenwich in 1817 or 1818, it was still standing, although certainly in a very dilapidated state. I will, however, give a slight sketch of it, as it is deeply impressed on my memory.

It was a tall, narrow building of dark red brick, much ornamented, and probably built in the time of Queen Elizabeth. It had two benches on each side the door; for, previous to Tadpole's taking possession of it, it had been an alehouse, and much frequented by seamen. The doctor had not removed these benches, as they were convenient, when the weather was fine, for those who waited for medicine or advice; and moreover, being a jocular, sociable man, he liked people to sit down there, and would often converse with them. Indeed, this assisted much to bring him into notice, and made him so well known among the humbler classes that none of them, if they required medicine or advice, ever thought of going to any one but Dr. Tadpole. He was very liberal and kind, and I believe there was hardly a poor person in the town who was not in his debt, for he never troubled them much about payment. He had some little property of his own, or he never could have carried on such a losing concern as his business really must have been to him. In early life he had been a surgeon in the navy, and was said, and I believe with justice, to be very clever in his profession. In defending himself against some act of oppression on the part of his captain—for in those times, the service was very different to what it is now—he had incurred the displeasure of the Navy Board, and had left the service. His enemies (for even the doctor had his enemies) asserted that he was turned out of the service; his friends, that he left the service in disgust; after all, a matter of little consequence. The doctor is now gone, and has left behind him in the town of Greenwich a character for charity and generosity of which no one can deprive him. He was buried in Greenwich churchyard; and never was there, perhaps, such a numerous procession as voluntarily followed his remains to the grave. The poor fully paid him the debt of gratitude, if they did not pay him their other debts; and when his will was opened, it was found that he had released them all from the latter. Peace be to him, and honor to his worth!

The shop of Dr. Tadpole was fitted up in a very curious manner, and excited a great deal of admiration. During his service afloat he had collected various objects of natural history which he had set up or prepared himself: the lower rows of bottles in the windows were full of snakes, lizards and other reptiles; the second tier of bottles in the window were the same as are now generally seen—large globes containing blue and yellow mixtures, with gold hieroglyphics outside of them; but between each of these bottles was a stuffed animal of some kind, generally a small monkey, or of that description. The third row of bottles was the most incomprehensible: no one could tell what was in them; and the doctor, when asked, would laugh and shake his head: this made the women very curious. I believe they were chiefly preparations of the stomach, and other portions of the interior of the animal frame; but the doctor always said that it was his row of "secrets," and used to amuse himself with evading the questions of the other sex. There were some larger specimens of natural history suspended from the ceiling, chiefly skulls and bones of animals; and on the shelves inside a great variety of stones and pebbles and fragments of marble figures, which the doctor had picked up, I believe, in the Mediterranean: altogether the shop was a strange medley, and made people stare very much when they came into it. The doctor kept an old woman to cook and clean the house, and his boy, Tom, whom I have already mentioned. Tom was a good-natured lad, and, as his master said, very fond of liquorice; but the doctor used to laugh at that (when Tom was not by), saying, "It's very true that Tom cribs my liquorice; but I will say this for him, he is very honest about jalap and rhubarb, and I have never missed a grain."

Of Tom, the apprentice, we learn something more than his capacity to devour licorice, some time after his first introduction to the reader of Marryat's novel.

"It was a beautiful sunshiny warm morning when I arose, and, as Bramble intended that we should leave Greenwich the next day, I thought I might as well call at the house of Dr. Tadpole, and try if I could see him before I went. When I arrived there he was not at home, but my namesake, Tom, was, as usual, in the shop. Tom was two or three years older than me, being

between seventeen and eighteen, and he had now grown a great tall fellow. We always were very good friends, when we occasionally met, and he generally appeared to be as good tempered and grinning as ever; but when I entered the shop I found him very grave and dejected, so much so that I could not help asking him what was the matter."

"Matter enough, I think," said Tom, who was pounding something in the mortar. "I'll not stay here, that's that. I'll break my indentures, as sure as my name's Tom Cob, and I'll set up an opposition, and I'll join the Friends of the People Society, and the Anti-Bible Society, and every other opposition Anti in the Country."

"Why, what has happened, Tom?"

"I'll make speeches against Church and against State, and against the Aristocracy, and Habeas Corpus, and against Physic, and against Standing Armies, and Magna Charta, and every other rascally tyranny and oppression to which we are subjected, that I will!" Here Tom gave such a thump with the pestle that I thought he would have split the mortar.

"But what is it, Tom?" inquired I, as I sat down. "What has the doctor done?"

"Why, I'll tell you, the liquorice is all gone, and he won't order any more."

"Well, that is because you have eaten it all."

"No, I haven't; I haven't eaten a bit for these five weeks: it's all been used in pharmacy, honestly used, and he can't deny it."

"Who used it?"

"Why, I did: he said he wouldn't stand my eating liquorice, and I told him that I shouldn't eat any more. No more I have, but I ain't well, and I prescribes for myself. Haven't I a right to do that? Mayn't I physic myself? I am a doctor as well as he is. Who makes up all the medicine, I should like to know? Who ties up the bottles and writes directions? Well, my insides are out of order, and I prescribes for myself—black draughts '*omnes duas horas sumendum*;' and now he says that, as the ingredients are all gone, I shan't take any more."

"And pray what were the ingredients, Tom?"

"Why, laxative and alterative, as suits my complaint—*Extract. liquor—aqua pura—haustus*."

"And what is that?"

"Liquorice and water, to be sure; there's nothing else I can take. I've tasted everything in the shop, from plate powder to *aqua fortis*, and everything goes against my stomach."

"Well, Tom, it's a hard case; but perhaps the doctor will think better of it."

"He'd better, or I'll set up for myself, for I won't stand it any longer; it ain't only for myself but for others that I care. Why, I've a hankering for Anny Whistle (you know her, don't you?), a pretty little girl with red lips—lives in Church Street. Well, as long as I could bring her a bit of liquorice when I went to see her all was smooth enough, and I got many a kiss when no one was nigh; but now that I can't fork out a bit as big as a marble, she's getting quite shy of me, and is always walking with Bill, the butcher's boy. I know he gives her bull's eyes—I seed him one day buying a ha'p'orth. Now, ain't that hard?"

"Why, certainly, the affair becomes serious; but, still, how you are to set up for yourself I don't know. You are not qualified."

"Oh! ain't I? Just as much as most doctors are. There must be a beginning, and if I gives wrong medicines at first, then I'll try another, and so on, until I come to what will cure them. Soon learn, Tom."

"Well, but how will you do about surgery?"

"Surgery? Oh, I'll do very well; don't know much about it just now—soon learn."

"Why, would you venture to take off a man's leg, Tom? Do you know how to take up the arteries?"

"Would I take off a man's leg? To be sure I would, as quick as the doctor could. As for the arteries, why, I might puzzle a little about them; but by the time I had taken off three or four legs I should know something about them. Practice makes perfect—soon learn, Tom."

"But all your first patients would die."

"I don't know that. At all events I should do my best, and no man can do more, and if they did die, why, it would be the visitation of God, wouldn't it?"

"Not altogether, I'm afraid. It won't do, Tom."

"It has done from the beginning of the world, and will do. I say there's no learning with-

out practice. People spoil at first in every trade, and make afterward, and a man ain't born a doctor any more than he is a carpenter."

"No, but if I recollect right, to be a surgeon you ought to walk the hospital, as they term it."

"Well, and haven't I for these last four years? When I carries out my basket of physic I walks the hospital right through, twice at least every day in the week."

"That's Greenwich Hospital."

"Well, so it is, and plenty of surgical cases in it. However, the doctor and I must come to a proper understanding. I didn't clean his boots this morning. I wish, if you see him, Tom, you'd reason with him a little."

"I'll see what I can do, but don't be rash. Good-by, Tom; mind you tell the doctor that I called."

"Well, I will; but that's not in my indentures."

I called in at the widow's after I left the doctor's shop, and communicated the intended rebellion on the part of Tom.

"Well," said Mrs. St. Felix, "I shall not forget to make the Spanish claim, and prevent Tom from walking Spanish. The doctor is very inconsiderate; he forgets that Tom's regard for liquorice is quite as strong as his own liking for a cigar. Now, if the doctor don't promise me to have a fresh supply for Tom, I won't let him have a cigar for himself."

The doctor was compelled to surrender at discretion. The next wagon brought down one hundred weight of liquorice, and Tom recovered his health and the smiles of Anny Whistle."

Having outgrown his "licorice love" episodes the reader is informed of a more serious affair.

"I quitted the hospital, and had arrived in Church Street, when, passing the doctor's house on my way to Mrs. St. Felix, Mr. Thomas Cobb, who had become a great dandy, and, in his own opinion at least, a great doctor, called to me, 'Saunders, my dear fellow, just come in, I wish to speak with you particularly.' I complied with his wishes. Mr. Cobb was remarkable in his dress. Having sprung up to the height of at least six feet in his stockings, he had become remarkably thin and spare, and the first idea that struck you when you saw him was that he was all pantaloons; for he wore blue cotton net tight pantaloons, and his Hessian boots were so low, and his waistcoat so short, that there was at least four feet, out of the sum total of six, composed of blue cotton net, which fitted very close to a very spare figure. He wore no cravat, but a turn-down collar with a black ribbon, his hair very long, with a very puny pair of mustachios on his upper lip, and something like a tuft on his chin. Altogether, he was a strange looking being, especially when he had substituted for his long coat a short nankeen jacket, which was the case at the time I am speaking of.

"Well, Mr. Cobb, what may be your pleasure with me? You must not detain me long, as I was about to call on Mrs. St. Felix."

"So I presumed, my dear sir," replied he; "and for that very reason I requested you to walk in. Take a chair. Friendship, Tom, is a great blessing; it is one of the charms of life. We have known each other long, and it is to tax your friendship that I have requested you to come in."

"Well, be as quick as you can, that's all," replied I.

"Festina lent, as Dr. Tadpole often says, adding that it is Latin for hat and boots. I am surprised at his ignorance of the classics; any schoolboy ought to know that caput is the Latin for hat, and Boötes for boots. But lately I have abandoned the classics, and have given up my soul to poetry."

"Indeed!"

"Yes; 'Friendship and Love' is my toast, whenever I am called upon at the club. What does Campbell say?"

"I'm sure I don't know."

"I'll tell you, Tom—

"Without the smile from heav'nly beauty won,
Oh, what were man? A world without a sun.'"

"Well, I dare say it's all true," replied I; "for if a woman does not smile upon a man he's not very likely to marry her, and therefore has no chance of having a son."

"Tom, you have no soul for poetry."

"Perhaps not; I have been too busy to read any."

"But you should; youth is the age of poetry."

"Well, I thought it was the time to work; moreover, I don't understand how youth can be age. But pray tell me what is it you want of me, for I want to see Mrs. St. Felix before dinner-time."

"Well, then, Tom, I am in love—deeply, desperately, irrevocably and everlastingly in love."

"I wish you well out of it," replied I, with some bitterness. "And pray with whom may you be so dreadfully in love—Anny Whistle?"

"Anny Whistle!—to the winds have I whistled her long ago. No, that was a juvenile fancy. Hear me. I am in love with the charming widow."

"What, Mrs. St. Felix?"

"Yes. Felix means happy in Latin, and my happiness depends upon her. I must either succeed, or—Tom, do you see that bottle?"

"Yes."

"Well, it's laudanum; that's all."

"But, Tom, you forget; you certainly would not supplant your patron, your master, I may say your benefactor—the doctor?"

"Why not? He has tried, and failed. He has been trying to make an impression upon her these ten years, but it's no go. Ain't I a doctor, as good as he? Ay, better, for I'm a young doctor, and he is an old one! All the ladies are for me now. I'm a very rising young man."

"Well, don't rise much higher, or your head will reach up to the shop ceiling. Have you anything more to say to me?"

"Why, I have hardly begun. You see, Tom, the widow looks upon me with a favorable eye, and more than once I have thought of popping the question over the counter; but I never could muster up courage, my love is so intense. As the poet says—

" 'Silence in love betrays more woe
Than words, howe'er so witty;
The beggar that is dum, you know,
Deserves our double pity.' "

"Now, Tom, I wish to tax your friendship. I wish you to speak for me."

"What, speak to Mrs. St. Felix?"

"Yes, be my ambassador. I have attempted to write some verses; but somehow or another I never could find rhymes. The poetic feeling is in me, nevertheless. Tell me, Tom, will you do what I ask?"

"But what makes you think that the widow is favorably inclined?"

"What? why, her behavior, to be sure. I never pass her but she laughs or smiles. And then the doctor is evidently jealous; accuses me of making wrong mixtures; of paying too much attention to dress; of reading too much; always finding fault. However, the time may come—I repeat my request; Tom, will you oblige me? You ought to have a fellow-feeling."

This last remark annoyed me. I felt convinced that Mrs. St. Felix was really laughing at him, so I replied, "I shall not refuse you, but recollect that he who has been so unsuccessful himself is not likely to succeed for others. You shall have your answer very soon."

"Thanks, Tom, thanks. My toast, as I said before, when called upon, is 'Friendship and Love.' "

The answer was soon delivered by Tom, the sailor, to Tom, the "doctor," who claimed to be a better doctor than his preceptor, because he was a "young doctor."

"Why," replied I, hardly having made my mind up what to say, yet not wishing to hurt his feelings, "the fact is, Tom, that the widow has a very good opinion of you."

"I knew that," interrupted Tom.

"And if she were ever to marry again—why, you would have quite as good a chance as the doctor."

"I was sure of that," said he.

"But at present, the widow—for reasons which she cannot explain to anybody—cannot think of entering into any new engagement."

"I see—no regular engagement."

"Exactly so; but as soon as she feels herself at liberty—"

"Yes," said Tom, breathless.

"Why, then she'll send, I presume, and let you know."

"I see, then, I may hope."

"Why, not exactly—but there will be no occasion to take laudanum."

"Not a drop, my dear fellow, depend upon it."

"There is no saying what may come to pass, you see, Tom: two, or three, or four years may—"

"Four years—that's a very long time."

"Nothing to a man sincerely in love."

"No, nothing—that's very true."

"So all you have to do is to follow up your profession quietly and steadily, and wait and see what time may bring forth."

"So I will—I'll wait twenty years, if that's all."

"I wished Tom good-by, thinking that it was probable that he would wait a great deal longer; but at all events, he was pacified and contented for the time, and there would be no great harm done, even if he did continue to make the widow the object of his passion for a year or two longer. It would keep him out of mischief, and away from Anny Whistle."



Former president John F. Hancock at his desk (1919). He was president of the AMERICAN PHARMACEUTICAL ASSOCIATION, 1873-1874. He died November 12, 1923. Mrs. Hancock recently celebrated her 89th birthday, and is looking forward to a visit with old friends. In later years Dr. Hancock was interested in the Procter Memorial soon to become a reality. Wm. Procter, Jr., was born in Baltimore.