

much fat-producing value as the doctor's proverbial bread pills. The testimony also developed the fact that some of their eminent doctors never existed; that the leading hospital used in the advertisements was a pure fabrication; that the foreign medals were phony; that the prominent food experts claimed to be the originators and sponsors for the tablets were either myths or failed to materialize and that the original formula of the tablets, the great and wonderful medical discovery, the beginning of the business, was born during an interview between a pharmacist and one of the defendants, neither one of whom was a physician or knew of any drug or mixture of drugs that possessed fat-making elements.

Notwithstanding the fact that the Government was put to a tremendous expense in this case and the defendants fined \$30,000, there was nothing whatever to prevent these defendants or others from continuing the business of fleecing the public in the same old way. In this case the business was effectively terminated by the issuing of a fraud order a short time after the sentence of the court was pronounced.

But even drastic action of this character does not deter some of these rascals from coming back. Apparently quackery dies hard. Here is an instance: A fraud order was issued against a business. The promoter later was taken into court, convicted by jury trial and a penitentiary sentence imposed. After serving the sentence, he made application to the Postmaster General to revoke the fraud order so that he might continue the business.

PHARMACY AND MEDICINE OF CHARLES KINGSLEY.*

BY A. W. LINTON.

To most Americans the name of Charles Kingsley will recall pleasant hours spent in the perusal of the striking passages of his great historical novels. What boy has not been spellbound by *Westward Ho!* that thrilling tale of adventure and of glorious fights by land and sea? Perhaps no work of fiction depicts more vividly the brave days of Queen Elizabeth when Englishmen in their little vessels lay in wait for Spanish treasure ships, and sacked the cities of the Spanish Main. *Hereward the Wake*, although not so well known as *Westward Ho!*, is a splendid story dealing with the last struggles between English and Norman in the period following the Conquest. Its scenes are laid in the Fen Country of eastern England, where the last bands of English to hold out against the invader took refuge on the Isle of Ely, and, protected by the almost impenetrable marshes, for years held the conquerors at bay. *Hypatia* is a story of Alexandria and the Christian church of the fifth century.

Kingsley's literary work was by no means confined to fiction. He was a most versatile author. His published works include poems, sermons, popular science, collections of addresses on social and sanitary subjects, travel and de-

* Read before Section on Historical Pharmacy, City of Washington meeting, 1920.—This is the third of a series of articles by the same author, dealing with the Pharmacy and Medicine of the masters of fiction. The other papers which have been published are: "Pharmacy and Medicine of Sir Walter Scott," JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, Vol. VI, No. 2, February 1917; "Pharmacy and Medicine of George Eliot," *Ibid.*, Vol. VIII, No. 12, December 1919.

scription, and works on nature study written for Kingsley's own boys and girls, but read by thousands of other children. In power of description of nature few writers excel Kingsley, especially when he writes of the Fen Country and of scenes in Devonshire, with both of which he was thoroughly familiar by youthful experience. Himself an ardent sportsman, his descriptions of the chase are especially vivid.

In many ways the life of Kingsley was an uneventful one. He was a clergyman of the Church of England, and most of his life after leaving the University of Cambridge was spent as rector of the parish of Eversly in Hampshire. Although in his later years his duties as chaplain of Queen Victoria and as a professor at Cambridge took him from Eversly at times, this little town remained his home to the close of his life. But the sermons preached and the books written in this rural community caused Kingsley to rank among the influential men of his time.

For the purposes of this paper the principal interest in the life and work of Charles Kingsley is due to his intense interest in sanitary reform, and his valiant efforts to arouse the people of England to the need for better homes, better water supply, and better social conditions for working people. While Kingsley was sincerely religious and never failed to minister to the spiritual needs of his parish, he recognized as few Englishmen of his generation that right living was almost impossible to people who were housed and fed as most of the English farm laborers and city workers were at that time. Kingsley, who for his day was well educated in science, had made a careful study of all matters pertaining to health and sanitation. He worked unceasingly to secure legislation to safeguard the health of the people. He was instrumental in organizing various associations intended to promote the welfare of the laboring classes. In a powerful way he used his sermons, his addresses, his poems and his works of fiction to bring home to educated people the need of caring for the bodies of Englishmen. While other clergymen, both of the Establishment and of the dissenting sects, were content to point out to their congregations the way to heaven, Kingsley recognized the fact that men and women, far from reaching a high spiritual plane, would not even remain respectable if crowded in filthy and unsanitary London tenements in which their only water supply was a sewer, and in which they never escaped from the vilest of sights and smells. While many economists of that day endorsed the brutal principle that in order to prevent overcrowding it was just as well to allow half of the children born to die of disease and undernourishment, Kingsley believed that every child had a right to the chance to grow to manhood or womanhood with sound body and mind.

At the time when Kingsley commenced to write, which was in the period between 1845 and 1850, there was the direst need of a prophet such as he. The working people of Great Britain, as yet without suffrage, without education, and without decent homes, were groping blindly for a way to better the condition of their class. In their ignorance they fell into many errors, such as the burning of farm machinery, then beginning to come into use. By the people of wealth and education little was done to better the condition of the poor except to distribute alms. Kingsley was filled with indignation at the rotten condition of the social structure, and his first novels were inspired by the desire to correct the abuses.

The novel, *Yeast*, which appeared in 1849, is a weird tale, and as a work of

fiction is not accorded a high rank. As the name indicates it was intended to show that a ferment was working in the minds of Englishmen which would cause, if not the overthrow of the existing institutions, then nothing less than their renovation and modernization. It is full of references to drains and sewers, to horrid sights and foul odors. The book is made tragic by the death of many of the characters, and Kingsley violated orthodox beliefs in not ascribing these deaths to the punishing hand of God, but to the ignorance and selfishness of man.

Lord Vieubois, one of the characters of *Yeast*, is a man who dreams of many reforms; who is interested in "high art and painted glass, spade farms and modern smell-traps, sanitary reforms and all other inventions possible and impossible for stretching the old formula to meet the new facts." Something of Kingsley's views on sewage disposal and other subjects may be gained from the following which he puts into the mouth of one of his characters in *Yeast*: "Only look down over that bridge-parapet, at that huge black-mouthed sewer, vomiting its pestilential riches across the mud. There it runs, and will run, hurrying to the sea vast stores of wealth, elaborated by Nature's chemistry into the ready materials of food; which proclaim too, by their own foul smell, God's will that they should be buried out of sight in the fruitful all-regenerating grave of earth; there it runs, turning them into the seeds of pestilence, filth and drunkenness. And then when it obeys the laws which we despise, and pestilence is come at last, men will pray against it, and confess it to be a judgment for their sins; but if you ask what sin, people will talk about *les voiles d'arrain*, as Fournier says, and tell you that it is presumptuous to pry into God's secret counsels, unless, perhaps, some fanatic should inform you that the cholera has been drawn down on the poor by the endowment of Maynooth by the rich." And again: "And how shall they be clean without water? And how can you wonder if their appetites, sickened with filth and self-disgust, crave after the gin-shop for temporary strength, and then for temporary forgetfulness? Every doctor in London knows that I speak the truth; would that every London preacher would tell the truth from his pulpit!"

Argemone, heroine of the story, dies of typhus contracted while caring for the sick of the village who were afflicted with that disease. On her death bed Argemone describes to her lover the horrible filth and misery she had seen, and the foul odors which had sickened her. She is haunted by a "Scent fiend." "Have I not," she says, "wanton'd in down and luxury, while they, by whose labour my luxuries were bought, were pining among scents and sounds, one day of which would have driven me mad! And then they wonder why men turn chartist."

Alton Locke, which appeared soon after *Yeast*, is a much better written, more coherent and convincing story. Alton Locke, the hero, while still very young, is apprenticed to a London tailor. Something of the horror of the London workshop of that day is revealed in the description of the establishment given to Alton by one of the tailors on the day he commenced his work. "Concentrated essence of man's flesh is this here as you're a breathing. Cellar workroom we calls Rheumatic Ward, because of the damp. Ground floor's Fever Ward—they as don't get typhus gets dysentery—your nose'd tell you why if you opened the back windy. First floor's Asthmy Ward—don't you hear 'um now through the cracks in the boards, a puffing away like a nest of young locomotives? And this here most august and uppermost cockloft is the Conscrumptive Hospital. First you begins

to cough, then you proceed to expectorate—spittoons, as you see, perwided free gracious for nothing”

Later in the story the young apprentice, victim of overwork and under-nourishment, is picked up on the street one night in an utterly exhausted condition by Costello, a policeman. While he has the boy in charge the pair are discovered by a party of medical students, who are, with some success, seeking forgetfulness of the drudgery of anatomy and pathology. They offer various suggestions as to relief measures:

“Memorialize the Health of Towns Commission.”

“Bleed him in the great toe.”

“Put a blister on the back of his left eye-ball.”

“Case of male astericks.”

“℞ Aquae pumpis purae quantum suff. Applicatur externo pro re nata”

These are some of the sallies with which Costello and his ward are greeted. However, the students take the boy to a public house, administer first aid in the form of hot brandy and water, watch with him during the night, and pay for his lodging and breakfast. “Rough diamonds,” Kingsley calls these medical students. “Your early life may be a coarse, too often a profligate one—but you know the people and the people know you: and your tenderness and care, bestowed without hope of repayment, cheers daily many a poor soul in hospital wards and fever cellars to meet its reward some day at the people’s hands. You belong to us at heart as the Paris barricades can tell.”

We sometimes think that in drug habits we have a strictly modern problem to deal with, but Alton Locke in a visit to the Fen Country of eastern England, then a hot-bed of malaria, learned that many of the fen people used what they called “elevation.” Farmer Porter was his informant concerning this habit. “What’s elevation?” “Oh! ho! ho!—yow goo into druggist’s shop o’ market day into Cambridge, and you’ll see the little boxes, doozens and doozens, a’ ready on the counter; and never a ven-man’s wife goo by, but what calls in for her pennord o’ elevation, to last her out the week. Oh! ho! ho! Well, it keeps women folk quiet, it do; and its mortal good agin ago pains.” “But what is it?” “Opium, bor’ alive, opium!” “But doesn’t it ruin their health? I should think it the very worst sort of drunkenness.” “Ow, well, you moi soy that—mak’th them cruel thin then, it do; but what can bodies do i’ th’ ago? But it’s a bad thing it is.”

Critics have said that Sandy Mackaye, the old Scotch bookseller of *Alton Locke*, is the finest character in Kingsley’s books. The great Carlyle himself considered that the delineations of the Scotch character in this countryman of his created by the mind of Kingsley was well-nigh perfect. In his last illness Sandy thus delivers himself on doctors and their arts: “Doctor? Who ca’d for doctors? Canst thou administer to a mind diseased? Can ye tak long nose, an’ short nose, an’ snub nose, an’ seventeen Deuks o’ Wellington out o’ my pud-dins? Will your castor oil, an’ your calomel an’ your croton, do that? D’ye ken a medicamentum that’ll put brains into workmen?—Non tribus Anticyris! Tons o’ hellebore—acres o’ strait waistcoats—a hail police-force o’ head doctors, winna do it. Juvat insanire—this their way is their folly, as auld Benjamin o’ Tudela saith of the heathen . . . Pulse? tongue? Ay, shak your lugs, an tak your fee, an’ dinna keep auld folk out o’ their graves”

Near the close of *Alton Locke* the author puts into the mouth of one of the characters words on the conservation of human life that even for to-day would be considered advanced: "The day will come when society will find it profitable, as well as just, to put the means of preserving life by travel within the reach of the poorest. But individuals must always begin by setting the examples, which the state too slowly, though surely (for the world is God's world after all), will learn to copy . . ."

By the time *Two Years Ago* was written Kingsley seems to have become a little more orthodox in politics and religion, and does not rail quite so much at existing institutions. However, he is still constantly concerned with drains and smells, and makes a thousand references to the selfishness of landlords who refuse to provide for the sanitation of their property, as well as to the stupidity of the working men who would rather die of the cholera than be deprived of their ancient privilege of piling filth in their door yards. There are plenty of references in *Two Years Ago* to matters medical and pharmaceutical. Tom Thurnall, one of the characters, is a young doctor who runs over the whole world in search of adventure, to be at last shipwrecked and cast ashore in the west of England. Being without resources he becomes the assistant of the only medical man of the place, one Heale, whose "surgery or in plain English, shop—was a doleful hole enough, in such dirt and confusion as might be expected from a drunken occupant, with a practice which was only not decaying because there was no rival in the field. But monopoly made the old man, as it makes most men, all the more lazy and careless; and there was not a drug on his shelves which could be warranted to work the effect set forth in that sanguine and too trustful book, the *Pharmacopoeia*, which, like Mr. Pecksniff's England, expects every man to do his duty, and is grievously disappointed." Thurnall, although a good physician, awakens the wrath of his old employer by his utter lack of the business instinct. When he has occasion to recommend Carrageen moss (*Chondrus*) instead of selling that which had lain in a drawer for ten years awaiting just this opportunity for a sale, he offers to show his would-be customer how to find plenty of Carrageen on the rocks at low tide, and how to collect and boil it.

As has been stated it was not only in his novels that Kingsley pleaded for sanitary reforms and for instruction in hygiene. He used with powerful effect his sermons, essays, and addresses as well. His *Sanitary and Social Essays* include such subjects as *The Two Breaths*, *The Science of Health*, *The Massacre of the Innocents*, and *The Tree of Knowledge*. We will make only the following quotation from this volume of essays: "Public opinion has declared against the necessity of sanitary reform, and is not public opinion known to be, in these last days, the Ithuriel's spear which is to unmask and destroy all the follies, superstitions, and cruelties of the universe? The immense majority of the British nation will neither cleanse themselves nor let others cleanse them; and are we not governed by majorities?"

Kingsley was in advance of his age in his fight against occupational diseases. We find the following in a sermon preached in 1861. "Meanwhile we are sorry (for we English are a kind-hearted people) for the victims of our luxury and neglect. Sorry for the thousands whom we let die every year by preventable diseases, because we are either too busy or too comfortable to save their lives. Sorry for

the thousands who are used up yearly in certain trades, in ministering to our comfort, even our very frivolities and luxuries. Sorry for the Sheffield grinders who go to work as to certain death; who count how many years they have left and say, 'A short life and a merry one, let us eat and drink for tomorrow we die.' Sorry for the people whose lower jaws decay away in lucifer match factories. Sorry for the diseases of artificial flower makers. Sorry for the boys working in glasshouses whole days and nights on end without rest, laboring in the very fire and wearing themselves for very vanity...."

W. J. Dawson, in his *Makers of English Fiction*, says that Kingsley attempted to do too many things to do them all equally well, or even to do one with entire perfection. But who shall say that his service to his own generation and to succeeding generations was less than that of some magnificent genius whose powers are concentrated upon one supreme task? Kingsley was not a great genius, but he was a great man; great because he loved men and understood men and strove with every power of his being to help men; to give them cleaner and stronger bodies, better trained minds, and to direct their souls to higher things. One of the highest tributes paid to Kingsley is found in an extract from a letter written by a student who heard him lecture at Cambridge: "Had Kingsley had to lecture upon broom-handles he would have done more good than many men would do with the most suggestive themes. His own noble, gallant, God-fearing, loving soul shone through everything, and we felt that it was good to be with him."

BIBLIOGRAPHY.

- "Charles Kingsley, Letters and Memories of his Life." Edited by his wife.
 W. J. Dawson, "Makers of English Fiction."
 Leslie Stephen, "Hours in a Library."

A CERTAIN PRESCRIPTION.*

BY L. E. SAYRE.

The writer feels that he need not apologize for presenting a paper on what would seem to be a very simple prescription for compounding by an experienced druggist. It is taken for granted that all observations, however trivial they may be, which are liable to be part of the experience of the drug clerk, let us say, would be acceptable for discussion in this Section.

The prescription, that I desire to discuss is the following:

Elix. Terpin. Hyd. et Heroinae.....	℥ i
Syr. Acidi Hydriodici.....	℥ ii
Aspirin.....	gr. 55
Atropinae Sulphatis.....	gr. 1/35
Acaciae.....	℥ ii
Creosot. Carb.....	gtts. 30
Aquae Cinnamomi, q. s. ad.....	℥ iv
M. Fiat sol.	

Sig. ℥ i every 3 or 4 hours.

This prescription was compounded by various pharmacists in one of our largest western cities and pronounced unsatisfactory by the physician until it fell into the

*Presented before Section on Practical Pharmacy and Dispensing, A. Ph. A., City of Washington meeting, 1920.