## SECTION ON HISTORICAL PHARMACY, AMERICAN PHARMACEUTICAL ASSOCIATION

THE PHARMACY AND MEDICINE OF SIR WALTER SCOTT.\*

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Then in what robes of honor habited The laureled wizard of the North appears! Who raised Prince Charlie's cohorts from the dead Made Rose's mirth and Flora's noble tears, And formed that shining legion at whose head Rides Waverly, triumphant o'er the years. —Joyce Kilmer.

There may be those who will consider a paper upon the above subject as not strictly entitled to a place among the contributions to the Historical Section. Although Scott's works are, of course, not histories, there is much of history contained in them. Sir Walter Scott was an antiquarian of remarkable ability, one who studied with painstaking care the records of the customs, manners and usages of bygone days, especially those of his own beloved Scotland. Possibly his portrayal of the practice of pharmacy and medicine in the periods of which he writes is as accurate as it is possible to obtain.

Although physicians and apothecaries are found less frequently in Scott's works than are their brethren of the clerical and legal professions, yet we may believe that Sir Walter was familiar with much that pertains to medicine. His maternal grandfather was a physician, a member of the medical faculty of the University of Edinburgh, and Scott counted among his intimate friends a number of physicians.

In Rob Roy we find a picture of the Glasgow surgeon apothecary of 1715 or thereabouts. The hero, Frank Osbaldistone, having been wounded in a duel, relates his experience as follows: "I stopped at a small unpretending shop, the sign of which intimated the indweller to be Christopher Neilson, surgeon and apothecary. I requested of a little boy who was pounding some stuff in a mortar, that he would procure me an audience of this learned pharmacopolist. He opened the door of the back shop, where I found a lively elderly man, who shook his head incredulously at some idle account I gave him of having been wounded by the button of my antagonist's foil breaking while I was engaged in a fencing match. When he had applied some lint and something else he thought proper to the trifling wound I had received, he observed: "There never was any button on the foil that made this hurt. Ah, young blood! young blood! But we surgeons are If it were not for hot blood and ill blood what would become a secret generation. of the learned faculties?' "

The Fortunes of Nigel, the scene of which is laid in the London of James I, introduces us to the apothecary of that period. In the opening chapter, Richard Moniplies, serving man to the hero of the story, and who has just arrived from Scotland, becomes the butt of the prentices of Temple Bar. "The probationary

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disciple of Galen, who stood at his master's door in his flat cap and canvas sleeves with a large wooden pestle in his hand," accosted the somewhat bewildered Scotsman as follows, "'What d'ye lack sir? Buy a choice Caledonian salve, *Flos Sulphur, cum butyro quant suff!*""

Poor Richard a little later becomes engaged in a brawl with some of the impudent prentice lads, and is injured. Like the victim of a present-day street accident he is carried to the apothecary for first-aid treatment. Not the apprentice, but the apothecary himself, Mr. Raredrench, ministers to the needs of the wounded man. This gentleman had rather more lore than knowledge, and began to talk of the sinciput and occiput, and cerebrum and cerebellum. One of the bystanders asked the apothecary whether bleeding might not be useful, when after humming and hawing for a moment, and being unable on the spur of the moment to suggest anything else, the man of pharmacy observed "'that it would at all events relieve the brain or cerebrum in case there was a tendency to the deposition of any extravasated blood.'"

The Abbot is a story of Mary Queen of Scots. A most interesting character of the story is Dr. Lundin. The Doctor's office was cumbered with "stuffed birds and lizards and bottled snakes and bundles of simples made up, and other parcels spread out to dry, and all the confusion, not to mention the mingled and sickening smells incidental to a druggist's stock in trade, **\* \* \*** also heaps of charcoal, crucibles, bolt-heads, stoves and the other furniture of a chemical laboratory." Dr. Lundin is indignant at the sight of the clown "'who, having the strength of a tower, has lived fifty years in the world and never encouraged the liberal sciences by buying one pennyworth of medicaments.'" On the other hand, the worthy Doctor is moved to admiration of a peasant with swollen legs and most cadaverous countenance, who, says the Doctor, "'breakfasts, luncheons, dines and sups at my advice, and not without my medicine, and for his own single part will go farther to clean out a moderate stock of pharmaceutica than half the country besides.'"

Dr. Lundin is loud in his denunciation of old women who disturb "'the regular progress of a learned and artificial cure with their syrups and their juleps and diascordium and mithradate and my lady what-shall-call-um's powder, and worthy Dame Trashem's pills, \* \* \* and cheat the regular and well studied physician."

Very numerous in Scott's stories are the wise old women, who with charms and simples are prepared to minister to the ills of mankind. Among such were old Euphane Fea of *The Pirate*, "who was well versed in all the simple pharmacy used by the natives of Zetland," and Ailsie Gourlay of the *Bride of Lammermoor*, "whose pharmacopoeia consisted partly of herbs selected in planetary hours, partly of words, signs, and charms which sometimes produced a favorable influence upon the imagination of the patients."

However, in the rough warlike times of which Scott wrote, not only were the wise women of the villages possessed of knowledge of simple remedies, but frequently ladies of quality, and even of the nobility, were versed in the healing art. In an age when men of medicine were few, and when strife and bloodshed were all too common, it frequently became the duty of some noble dame or damsel possessed of slight knowledge of medicine and surgery to bind up the wounds of the warrior.

In A Legend of Montrose, a story built around the brilliant campaigns of the

Marquis of Montrose during the Cromwellian wars, we find a picture of Annot Lyle "superintending the preparation of vulnerary herbs to be applied to the wounded, receiving reports from different females respecting those under their separate charge, and distributing what means she had for their relief."

Critics have judged that in all the wide range of fiction there is no more beautiful character of a daughter of Israel than that of Rebecca in *Ivanhoe*. Every reader of this, probably the best known of Scott's stories, will remember Rebecca's defiance of the advances of the crafty Templar, Brian de Bois Gilbert. It will be remembered also that Rebecca possessed some knowledge of medicine. In the words of Isaac, her father, "I well know that the lessons of Miriam, daughter of the Rabbi Manasses of Byzantium, \* \* \* have made thee skilful in the art of healing, and that thou knowest the craft of herbs and force of elixirs."

It was through the ministrations of Rebecca, and the application of a marvelous warming and spicy smelling ointment that Ivanhoe was cured of the desperate wounds received in the tournament. Later in the story Rebecca is accused of witchcraft, and "two mediciners, a monk and a barber, being questioned in regard to the balsam, which in the hands of Rebecca had effected many cures, testified that they knew nothing of the materials excepting that they savored of myrrh and camphire, which they took to be oriental herbs. But with true professional hatred of a successful practitioner, they insinuated that since the medicine was beyond their own knowledge it must necessarily have been compounded from an unlawful and magical pharmacopoeia."

It may be of interest to note that the original of the character of Rebecca was Miss Rebecca Gratz of Philadelphia. This young lady was a very dear friend of Miss Hoffman, the fiancée of Washington Irving. Miss Gratz, although beautiful and accomplished, gave her life to philanthropy and was known for her good works. By Irving her character was described to his friend Scott, who made use of it as has been stated. A picture of the life of the real Rebecca is given in the answer of Rebecca of York, when being asked by the Saxon Rowena whether the Jews maintained convents, Rebecca replied, "'No, lady, but among our people since the time of Abraham downwards, have been women who have devoted their thoughts to Heaven and their actions to works of kindness to men, tending the sick, feeding the hungry and relieving the distressed. Among these will Rebecca be numbered.'"

Turning from *Ivanhoe* it is fitting that we glance next at that other tale of Richard Couer de Lion, *The Talisman*. The scene of this story is laid in Palestine at the time of the Third Crusade. At that period the Moslem nations were in many respects superior in intelligence to the people of western Europe. The soldiers of the Cross, by contact with their foes, gathered much of the learning of the East, and this came to have a profound influence upon European civilization. In *The Talisman* we are given a glimpse of the Moslem medical practice of that day as conceived by Scott. El Hakim, an Arabian physician, who later proves to be the Sultan Saladin in disguise, enters the fever-stricken camp of the Christians and works marvelous cures. He is led to the bedside of Richard of England, himself prostrated by the fever. After learning the symptoms and observing the pulse "the sage next filled a cup with spring water and dipped into it the small red purse. \* \* When he seemed to think it sufficiently medicated he

was about to offer it to the sovereign, who prevented him by saying, 'Hold an instant, thou hast felt my pulse, let me lay my fingers on thine.' \* \* 'His blood beats calm as an infant's,' said the King; 'so throbs not theirs who poison princes.' "

The king recovers under the treatment and is profoundly impressed with the marvelous value of the medicine or 'talisman.' "'A most rare medicine,' said the King, 'and a commodious, and as it may be carried in the leech's purse, would save the whole caravan of camels which they require to carry drugs and physic stuff.' "

Later in the story, El Hakim, in treating the sick and wounded knight Sir Kenneth, makes use of what we may understand to be opium. The physician thus describes his remedy: "'This is one of those productions of Allah sent on earth for a blessing, though man's wickedness and weakness have sometimes converted it into a curse. It is powerful as the winecup of the Nazarene to drop the curtain on the sleepless eye and to relieve the burden of the overloaded bosom, but when applied to the purposes of indulgence and debauchery, it rends the nerves, destroys the strength, weakens the intellect and undermines life." "We are given also a picture of the patient's sensations as he passes under the influence of the opium. "Sleep came not at first, but in her stead a train of pleasing but not of rousing nor awakening sensations. A state ensued, in which, still conscious of his own identity and his own condition, the knight felt enabled to consider them not only without alarm and sorrow, but as composedly as he might have viewed the stories of his own misfortunes acted upon a stage; or rather as a disembodied spirit might regard the transactions of its past existence. From this state of repose, amounting almost to apathy concerning the past, his thoughts were carried forward to the future, which in spite of all that existed to overcloud the prospect, glittered in such lures, as under much happier auspices his unstimulated imagination had not been able to produce, even in its most exalted state. \* \* \* Gradually as the intellectual sight became more clouded, these gay visions became obscure, like the dying hues of sunset, until they were at last lost in total oblivion."

Sir Walter Scott, true lover of dogs as he was, describes most graphically El Hakim's surgical treatment of Sir Kenneth's noble hound which had been wounded by a spear thrust. "The physician inspected and handled Roswal's wound with as much care and attention as if he had been a human being. He then took forth a case of instruments, and by the judicious and skilful application of pincers, withdrew from the wounded shoulder the fragments of the weapon and stopped with styptics and bandages the effusion of blood which followed, the creature all the time suffering him patiently to perform these kind offices as if he had been aware of his kind intentions."

There are found in a number of the Waverly novels some most interesting references to the home remedies used in treatment of domestic animals. In the *Bride of Lammermoor*, Bucklaw recommends to his friend Ravenswood the following remedy for a lame horse: "'Take a fat, suckling mastiff whelp, flay and bowel him, stuff the body full of black and gray snails, roast a reasonable time, and baste with oil of spikenard, saffron, cinnamon, and honey, anoint with the dripping, working it in.'"

In Heart of Midlothian we find Jeanie Deans, an humble Scottish dairy maid,

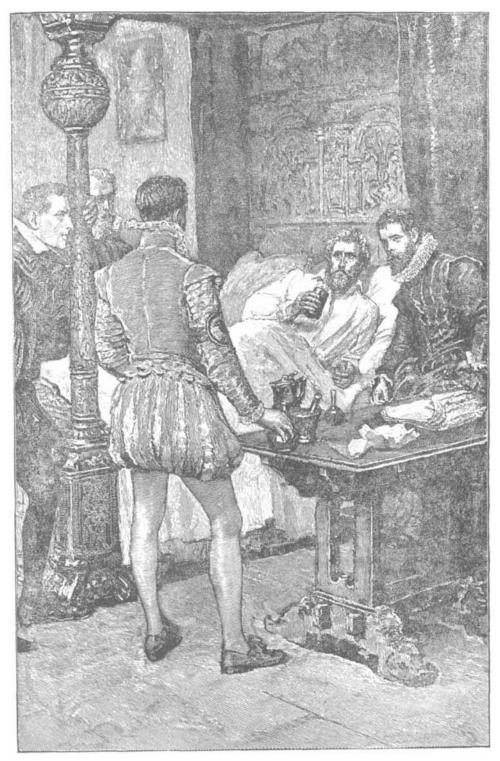
making a toilsome pilgrimage to London to seek a pardon for her condemned sister. True to her thrifty Scotch character, Jeanie does not fail to pick up useful information along the way. She writes to her father, the cow-feeder of St. Leonard's as follows: "'I learned from a decent woman, a grazier's widow, that they have a cure for the muir ill in Cumberland, which is one pint of yill (ale) boiled wi' sope and hartshorn drops, and toomed down the creature's throat wi' ane whorn. Ye might try it on the bauson-faced year old quey, an it does nae gude it can do nae ill.'"

Then, too, there are the horse-balls which Sir Henry Lee, remembered by all readers of *Woodstock*, relied upon to save Charles Stuart when he was hard pressed by Cromwell's troopers. "'In this box,' said he, 'are six balls prepared of the most cordial spices, mixed with medicaments of the choicest and most invigorating quality. Given from hour to hour, wrapt in a covering of good beef or venison, a horse of spirit will not flag for five hours at the speed of fifteen miles an hour.'"

For a remarkable portrayal of the sixteenth century alchemist we may turn to the pages of *Kenilworth*, the sad story of poor Amy Robsart. One of the characters of this tale is Dr. Dooboobie, otherwise known as Alasco, who "'gathered night maddow and male fern seed through use of which men walk invisible, pretended some advances toward panacea or universal elixir, and affected to convert good lead into sorry silver.'" "'He was a learned distiller of simples, and a profound chemist—made several efforts to fix mercury, and judged himself to have made a fair hit at the philosopher's stone.'" This Alasco is a scoundrel, and is employed by the villainous Varney to poison not only Amy Robsart, but the Earl of Sussex. For this purpose Alasco makes use of his Manna of St. Nicholas, a slowly acting poison.

The machinations of Varney and his tool Alasco are foiled in great measure by Wayland Smith, a former pupil of Alasco, who knows the antidote for the Manna of St. Nicholas. Most interesting is the account of Smith's search through the drug shops of London for the various ingredients of the antidote. One of these, very rare and difficult to obtain, after rejecting many substitutes, Smith finally discovers in the shop of old Yoglan, a Jewish apothecary. "Have you scales,' said Wayland. The Jew pointed to those for common use. "They must be other than these,' said Wayland. The Jew hung his head, took from a steel plated casket a pair of scales beautifully mounted, and said as he adjusted them, 'With these I do mine own experiment. One hair of the High Priest's beard would turn them.' 'It suffices,' said the artist, and weighed out two drachms for himself of the black powder." Later Wayland "obtained from the cook the service of a mortar, shut himself up in a private chamber, where he mixed, pounded and amalgamated the drugs each in its due proportion—with an address that plainly showed him well practiced in all the manual operations of pharmacy."

Wayland Smith was frank to acknowledge that he had commenced his practice by treating horses, gradually extending his field to human patients. For he says, "The seeds of all maladies are the same, and if turpentine, pitch, tar and beef suet, mingled with turmerick, gum mastic and one head of garlick can cure the horse that hath been grieved with a nail, I see not but what it may benefit the man that hath been pricked with a sword." He was especially renowned for a cure for bots in cattle, which noted remedy was described by Jack Hostler as smelling and tasting like " 'hartshorn and savin mixed with vinegar.' "



The Earl of Sussex takes Wayland's Potion—Kenilworth. Waverly Novels, Dryburgh Edition, Adam and Charles Black, London.

A number of references are found in Scott's works to smallpox and the modifications in the treatment of this dread disease which came to pass as superstition was gradually replaced by science. In The Surgeon's Daughter we find a description of the treatment commonly followed in the middle of the eighteenth "It is well known that the ancient way of treating smallpox was to century. refuse the patient everything which nature urged him to desire, and, in particular, to confine him to heated rooms, beds loaded with blankets, and spiced wine, when nature called for cold water and fresh air." The young physician Hartley, in treating the family of General Witherington, introduces more modern practices. "Windows were thrown open, fires reduced or discontinued, loads of bedclothes removed, cooling drinks superseded mulled wine and spices. Doctors Tourniquet and Lancelot retired in disgust, menacing something like a general pestilence in vengeance of what they termed rebellion against neglect of the aphorisms of Hippocrates. Hartley proceeded quietly and steadily, and the patients got into a fair road to recovery."

In *Heart of Midlothian*, when Jeanie Deans meets the queen, we read: "The lady who seemed the principal person had remarkably good features though somewhat injured by the smallpox, that venomous scourge which each village Esculapius (thanks to Jenner) can now tame as easily as their tutelary deity subdued the python."

The Surgeon's Daughter, already referred to, pays a splendid tribute to the Scottish rural physician of the eighteenth and early nineteenth centuries. "This humble practitioner, if he does not find patients at his door, seeks them through a wide circle. Like the ghostly lover of Bürger's Leonora, he mounts at midnight and traverses in darkness paths which to those less accustomed to them seem formidable in daylight, through straits where the slightest aberration would plunge him into a morass... In short there is not any creature in Scotland that works harder and is more poorly requited than the country doctor unless, perhaps, it may be his horse."

Dr. Gideon Gray was a man of this type, whose annual income approached two hundred pounds a year, for which he traveled about five thousand miles upon his ponies Pestle and Mortar, which he rode alternately. "He was of such reputation in the medical world that he had been more than once advised to exchange Middlemas for some of the larger towns of Scotland, or for Edinburgh itself. This advice he had always declined."

There is every reason to believe that the original of Dr. Gray was Dr. Clarkson of Selkirk, Scott's own physician, who pursued his noble career for more than half a century. He never refused by night or day to answer a call to the home of the humblest dweller in all that wild border country, and like other self-sacrificing physicians of all ages and countries, ministered in countless cases where there was no hope of recompense.

Many other references to matters medical and pharmaceutical are found in the Waverly novels, but a sufficient number have been quoted. If in most of those given we find much superstition mingled with a little knowledge, we must bear in mind that all through the centuries practitioners of medicine and pharmacy, like the followers of other sciences, have been shackled by the bonds of ignorance, and that it is only during the last few decades that medicine in its various branches is at last being placed upon a truly rational basis.