# The JOURNAL

#### OF THE RUTGERS UNIVERSITY LIBRARY

VOLUME XXV

DECEMBER 1961

NUMBER I

### A STORE MIXT, VARIOUS, UNIVERSAL

#### BY DAVID L. COWEN

Professor Cowen, a Rutgers alumnus, is Chairman of the Department of History and Political Science of University College, Rutgers, and Lecturer in the History of Pharmacy at the Rutgers College of Pharmacy.

N October 11, 1784 Smith, Moore & Co., "a store mixt, various, universal," advertised for sale, in the New York Packet, a general collection of materia medica and related items. The advertisement was separately issued as a broadside, reproduced here, and the Rutgers University Library has recently acquired the only known copy of it.

The broadside has certain distinctive features. Although the eighteenth-century polemicist resorted to versification at the lifting of a quill (and despite assonance, arrhythmy, and other faults produced a most entertaining body of doggerel), the rendering of a catalogue of the materia medica into verse, no matter how "fractured," was a much rarer feat of composition. It was, in fact, something of a heroic achievement, for our eighteenth-century copywriter managed to knead no fewer than 120 names, most of them exotic, into his poetics. He must be forgiven for running out of space and rhyme, for leaving "num'rous names untold," and for resorting to the excuse that

'Twould poze a Swift the whole t'express Such crabbed terms in flowing verse.

ATTHE

## MEDICAL PILLAR,

Smith, Moore & Co.

HAVE FOR SALE,

A GENERAL COLLECTION of the

### MATERIA MEDICA,

Botanical, Chymical, and Galenical

PRODUC'D from field, from fire, and pot, & Each compound, mineral, herb and mot, Roden Columb : Giya : Gent: Valerine ; Cortex Semarab : Winterian; Rochelle and Glauber's fales, and thell Lee ; Grees of Greek name and Arabut, Gelb: Kine : and Opopousz, Offine, Janiper, and Styren, Campber, Thus, Alpes, Gueist, Myrrh, Gamboge, Scammony, Amme Fine Sowers of Sulphur : here you'll find The red Back spo of pureft kind; Magnella, Allum, Cream of Turt, Tempinds, Coral, and Sal Mart : Syrups and Exreatly, Seeds and Scans, Mulk, Salbon Superfine, and Manne, Coraway, Fennel, Spanish Flics, Cam'mile, Cinnabers, and Crab's-eyer, Beff frathern Skins, the sed and white, And Candied-fugar brown and light; Figr, Sage, Salop, and Tin-fol', Peerl-burley, Starch and Otles Oil, Spice, Raifine, Curranu, Surgeon's now, Salt-petre, Bifmuth, Potath, Boran, Green oil-cloth, Sponge, Aleppo-galle, Corks, Aqua Fort : Zine : Liqu'ties-balls, Mellon Canadian, and Tolu, Capiri, Gileat, and Peru, The pured Richer, Esu de luce, Liquor by Hulman, Lemon-juler, Hingleli, and Hartborne-Stavings, To clear your coffee or wine-leavings,

Strong Oil of Bays, and Argent. Viv.

For Hollan sermin left alive.

Medicines appear'd by 10912 charter,
Janes, Godfry, Anderfon, Coarr pl. fler,
With Kryfer's, Hooper's, Lockyer's Pills,
And Heney Ballom Dothe Hill's;
Bateman and Dafty, Jefults deops,
Id And all the Tindhers of the floors,
Id And all the Tindhers of the floors,
As Stoughton, Turlinguas and General's,
Pare Evidih Oil and Hardem Dieso;
The Oils, Kana, Effences all flor,
And Janipers shault divine,
With all the elegant Performen
To ferre the ling, or form their rooms.

Fine Influments of various prior,

And dyringes of every fine,

Scales large and finall with weights of the second of the second

To clole the ten'ous rough rehearful,
A finer mist, various, univerful,
Where in retwen for favours floan,
By friends remote, or friends in town,
Or if Partitioners command
Supplies of feety if view with pleafure
The offer feel, the ample measure,
Trade fmiling—and berfailing treafure.

NEW-YORK: PRINTED BY SAMUEL LOUDON.

The broadside is also distinctive because imprints that list medicines from professional compendia are rare. Handbills advertising patent medicines were quite common, but a rather wide search has so far revealed only three other such professional imprints before 1820. The first was a lengthy list using technical nomenclature, called "A Catalogue of Medicines Sold by Mr. Robert Talbot at Burlington," purportedly printed at Burlington, N.J. in 1727. The second was a rather famous broadside: "Benedict Arnold has just imported (via New York) and sells at his store in New-Haven, a very large assortment of drugs and chemical preparations," ca. 1765. It included, however, an insignificant number of professional medicines. The last was an announcement by Samuel Yorke of the auction of "Drugs and Medicines. On Tuesday afternoon . . . at the Auction Store" in Philadelphia (1800). (Pamphlet catalogues were much more common, and at least eight or nine of them, for professional use, were published between 1760 and 1817.)

Smith and Moore's advertisement is more than a bibliographic and literary curiosity. It is a document out of which can be extracted a good deal of the history of western civilization, and a good deal of the history of medicine.

The reference in the broadside to the Greek and "Arabac" origins of the names of the gums epitomizes the history of the materia medica. It was Greco-Roman medicine, continued by the Byzantines, appropriated by the Saracens, then augmented by them, and transmitted by them to western Europe, that continued virtually unchallenged until Paracelsus in the sixteenth century. Thus for example the resin storax, which is on Smith and Moore's list, was known to Dioscorides and Pliny, re-appeared in the sixth and seventh-century writings of Aëtius and Paulus Aegineta, was known to Rhazes in the tenth century and was generally familiar to the Saracenic physicians. A related resin of the same name was a twelfth-century export from Sicily.<sup>2</sup>

In total, the list of substances Smith and Moore were offering for sale that were to be found in the British pharmacopoeias and dispensa-

<sup>&</sup>lt;sup>1</sup> The only known copy, at the New Jersey Historical Society is missing the bottom third or fourth.

<sup>&</sup>lt;sup>2</sup> Friedrich A. Flückiger and Daniel Hanbury, *Pharmacographia* (London, 1879), pp. 271, 276.

tories<sup>3</sup> (i.e., excluding both the non-medicinals and the patent medicines) indicates that of fifty-eight that could be traced, twenty-six were known to the ancients (twenty-three of them can be found in Dioscorides; not a few go much farther back into history, gum Arabic, for example, has been traced to seventeenth-century B.C. Egypt), nine were either introduced by the Saracens or brought by them from farther east (e.g., camphor from the Far East; tamarinds from India) and only twelve were of medieval or early modern European origin. Several of the last were of a chemical nature and perhaps also involved a Saracenic influence.

All of this brings to mind the powerful impetus given by the drug trade to the discovery and exploration of the world in the fifteenth century, and to the expansion of commerce that followed. The Smith and Moore list illustrates this impetus with two drugs that were introduced into Europe directly from Africa and Asia, both in the eighteenth century: colombo from Mozambique and Ceylon, and kino from Gambia, and with eight from America: guaiacum introduced by the Spanish from the West Indies before 1517, capivi introduced by the Portuguese from Brazil in 1570, the balsam of Peru and the balsam of Tolu, introduced by Monardes before 1574, simarouba and Canadian balsam, introduced by the French from Guiana and Canada in the eighteenth century, winterian, introduced by the British from the Straits of Magellan in 1579, and finally the red Peruvian bark, which found its way into general use when the British captured a shipload from the Spanish in 1779. All of this expansion was accompanied by the decline of the Italian cities as the more westerly countries moved out around the world. The history of another item on Smith and Moore's list tells the story succinctly: impure borax, said an eighteenth-century account, "was formerly

<sup>&</sup>lt;sup>3</sup> Except for a Boston, 1720 reprint of Nicholas Culpeper's *Pharmacopoeia Londinensis* (1652), no work of this nature intended for professional use, other than two Revolutionary formularies, appeared in the United States until 1791 with the publication of the *Edinburgh New Dispensatory* in Philadelphia. None was put out by an American until 1798, and that in Paris. (William Tazewell, *Vade Mecum Medicum*, Paris, Philadelphia and Edinburgh, 1798), and no really indigenous professional publication appeared until James R. Coxe's *American Dispensatory* was issued in Philadelphia in 1806. The American practitioner made use of British, and sometimes French, compendia. See D. L. Cowen, *America's Pre-Pharmacopoeial Literature* (Madison, 1961).

refined at Venice, afterwards in Holland only, and now . . . in England also."

But the broadside also reflects more recent history, that of the American Revolution. The broadside was but one of a number of such advertisements in 1784,5 all seeming to suggest that New York harbor was teeming with British ships, laden with roots, resins, and gums. The British had lost no time in resuming trade with their former colonies, a profitable trade in any event, but especially so since some London drug houses were known to be sending out "rubbish . . . for the American market."6

Two other reminders of the American Revolution are found in the broadside. The Hessian vermin (or usually, Hessian fly) referred to at the bottom of the first column, was the name given to the cecidomvia destructor, a midge that lived up to its name in a grain field, and which the Americans insisted, erroneously, had been brought over by the Hessians. And the appearance of red bark on the list is a consequence of Spain's involvement in the Revolutionary War, and the British capture of a Spanish ship, as already mentioned.

The description of Smith, Moore & Co.'s store as "mixt" and "various" was not mere poetic redundancy. The different categories of merchandise carried, and the variety of articles in each category, more than justified the emphasis.

In the first verse (the whole left column) along with the materia medica, confections, groceries, chemicals, and sundries (leather, tinfoil, oil-cloth) are listed. In the second verse, perfumes are mentioned; the third verse lists medical, pharmaceutical, and surgical equipment, and paints.

Smith and Moore were not, however, operating a general store, as "the Medical Pillar" indicates. Theirs was a druggist's shop, essen-

6 The claim was made in 1817 by William Allen, of one of the best London drug houses, concerning the competition he was facing. Ernest C. Cripps, Plough Court (London, 1927), p. 29.

<sup>4</sup> William Lewis, An Experimental History of the Materia Medica, 4th ed., ed. by J. Aiken (London, 1791), 1, 231. The historical accounts of specific drugs given in this paper are mainly from Lewis and from Flückiger and Hanbury (see fn. 2).

<sup>&</sup>lt;sup>5</sup> See The Medical Register (New York, 1884), XXII, 243-253.

<sup>7</sup> Of particular interest is the "late invented mode" of mortar. The reference is probably to Wedgwood mortars, made about 1780 by Josiah Wedgwood at the behest of Joseph Priestley. See, George Griffenhagen, Tools of the Apothecary (Washington, 1957), p. 6.

tially a wholesale establishment, catering to physicians, apothecaries, and "private practitioners." The association of confectionery or perfumery, or chemistry, or groceries, or some combination of them, with pharmacy, readily understandable, was a European tradition coming out of the Middle Ages, and certainly understandable in a frontier country. In England, for example, the Apothecaries Society included grocers from 1606 to 1617.

Nor were Smith and Moore operating an apothecary shop. The American apothecary shop was run either by a physician or apothecary, or both. The latter, in the British tradition, was a general practitioner of medicine who diagnosed, prescribed, and compounded for his own patients, and also compounded the prescriptions of others. The American drug store that developed in the nineteenth century, as the pharmacist became increasingly restricted to his specialized function, tended to join the prescription services of the apothecary with the mixed and various merchandising services of the druggist's shop. Even in eighteenth-century New England apothecaries might also be booksellers, because the pharmacist needed to find other sources of income once he was removed from the general practice of medicine.

Smith and Moore, as the second verse of the broadside indicates, also carried a very complete line of "medicines approv'd by royal charter"—that is, patent medicines. These successors to the older polypharmacy were British imports that enjoyed a very great popularity in the colonies. During the Revolution American druggists had learned to imitate the contents of these nostrums and even to bottle them in the distinctive containers then in vogue, so it is by no means certain that Smith and Moore's were genuine. After the Revolution the practice continued, the British glass makers providing the bottles until 1820, after which American enterprise counterfeited the bottle as well. Some of these patent medicines, in fact, were common enough to become regular items in the sea chests put up by New England apothecaries.

<sup>&</sup>lt;sup>8</sup> See, George B. Griffenhagen and James H. Young, "Old English Patent Medicines in America," Contributions from the Museum of History and Technology, United States National Museum, Bulletin 218, (Washington, Smithsonian, 1959), Paper 10.

<sup>9</sup> E. g., Medicine Chests with suitable directions prepared by Edward S. Lang in his

<sup>&</sup>lt;sup>9</sup> E. g., Medicine Chests with suitable directions prepared by Edward S. Lang in his shop in . . . Salem [Salem, 1800], contained Turlington's Balsam, Anderson's Pills, and British Oil.

It is perhaps by now clear that Smith and Moore's, and indeed any druggist's shop, was also a "universal shop." The colombo root (Ceylon), gamboge (Cambodia), Aleppo-galls, Canadian balsam, balsam of Tolu (Colombia), and balsam of Peru suggest by their names alone the diverse and world-wide sources of the products that were listed on the broadside. If Smith and Moore were stocking the genuine article and getting it from a good, if not original source, their shelves and drawers, pots and barrels, contained products from China and Sumatra (camphor), Tonquin (musk), Persia (opium), Socotora in the Indian Ocean (aloes), Arabia, (balsam of Gilead and myrrh), Egypt (acacia and senna). Gambia (kino), Brazil (capivi), Muscovy (crab's eyes—from the stomach of the crawfish—and isinglass), the Mediterranean (coral), Jamaica (guaiac), Terra del Fuego (winterian), from almost all of the countries of Europe, and from sundry other places already mentioned.

Indeed, about the only geographic area not represented as much as one might expect in Smith and Moore's list was the United States. Probably, however, the potash was an American product: it was an article of export that was replacing Russian potash in England. Perhaps also they carried pearl-ash, ginseng and beeswax: at least their competitors were advertising that they would accept these items in trade. 12

The gums, the resins, the balsams, the barks, the flowers, the roots from all of these places must have given the shop a fragrance as mixed and various as the contents of the shop. The scents certainly must have been more pleasing than those of the British apothecary shop of the previous century where the fragrances of the Orient and tropics were overwhelmed by the odors of the Animalium Partes, Excrementa et Opera that the pharmacopoeia made officinal. These items the redoubtable Nicholas Culpeper was certain "might turn your stomach," and no one who has read the catalogue of Animalia can question his verdict.

<sup>&</sup>lt;sup>10</sup> Works on American materia medica, excepting such early works as Monardes, were still to come. Schoepf's *Materia Medica Americana* did not appear until 1787, Benjamin Smith Barton's *Collections for an Essay Towards a Materia Medica of the United States* until 1798.

<sup>11</sup> Lewis, II, 298.

<sup>12</sup> The Medical Register (New York, 1884), XXII, 245, 248, 287.

<sup>13</sup> Op. cit., p. 77.

The materia medica offered for sale by Smith and Moore was a very small one indeed for the age, 14 although a vast multitude may well have been hidden in the categories of syrups, extracts, and essences, and in the "num'rous names untold." Yet the brief list contained remedies to take care of virtually the entire gamut of therapeutics: cathartics, corroborants, astringents, aperients, diuretics, detergents, tonics, antiseptics, errhines, uterines, stomachics, etc., were all included. Indeed Smith and Moore's practitioner-customers and friends could do quite adequately in their practice with this list alone. Every item on it had a place in the pharmacopoeias and dispensatories, and even in such ubiquitous publications as William Buchan's Domestic Medicine. This had added a "Dispensatory for Private Practitioners" in 1781 which was carried by all the post-1784 printings in the United States.

Of the remedies in regular use there were, however, missing from Smith and Moore's list, antimony, calomel, ipecacuanha, jalap, seneka, and ginseng. The last two were American plants, the ginseng apparently being quite common; the first four were rather strong purges and emetics, and one wonders if Smith and Moore were exercising some sort of professional selection. In any case, these four drugs were available at Craigie, Wainwright & Co., across the street from Smith, Moore & Co., and it is hardly likely that the latter refused to handle them. It was more likely that these drugs fell victim to the demands of versification. (Digitalis, it might be noted, was advertised neither by Craigie and Wainwright nor Smith and Moore. It had just been returned to the Edinburgh Pharmacopoeia in 1783 after a forty-year absence.)

The nature of the materia medica at the early time of American independence is well illustrated by Smith and Moore's list. This (not counting the patent medicines) included forty-one medicinals of vegetable origin, seven of animal origin, six of mineral origin, and seven of what might be called chemical origin. The preponderance of vegetable drugs, a condition that was to prevail up to very recent times, reflected the ancient, traditional, and authoritarian basis of

<sup>&</sup>lt;sup>14</sup> The third edition of the *Pharmacopoeia Edinburgensis* (1735) contained a total of 590 "simples"; the ninth (1803) contained a "materia medica" of 222 items.

<sup>15</sup> The Medical Register (New York, 1884), XXII, 250.

medicine. Galen and Dioscorides had dominated medical practice for 1500 years.

Yet Smith and Moore's list indicates that changes were taking place. For example, there is absent from the list the *Electuary of Mithridates* and the *Venice Treacle*, two polypharmaceutical preparations that Culpeper had aptly labelled "terrible messes of altogether." These had a long history and had been the mainstay of English apothecary shops in the seventeenth and early eighteenth centuries. They had been dropped from the *Edinburgh Pharmacopoeia* only in 1756, after a devastating criticism by William Heberden.<sup>17</sup>

The presence of but seven medicines of animal origin<sup>18</sup> is another indication of the changes that were taking place. The first *London Pharmacopoeia* (1618) enumerated 162 animal products, much of them vile and unbelievable, a list that was gradually whittled down in the eighteenth century. Smith and Moore's short list is an indication of the more reasonable evaluation of medicines that was beginning to take place, or perhaps the result of a growing sensitivity of the stomachs of the apothecaries and physicians, not to mention their patients.

The few "chemicals" on Smith and Moore's list demonstrate that the influence of Paracelsus was more spagyric (the art of separation and combining) than chemical. The presence of Glauber's salts on the list indicated the progress that was being made. Glauber had used the process of double decomposition and "was groping toward the idea of chemical affinity." The new chemistry which was to be so largely foreshadowed by the work of apothecary-chemists (Marggraf, Klaproth, Scheele, Rouelle) had as yet not begun to influence medicine. The chemical revolution had almost arrived in 1784, but its great impact on medicine had to await the next century when another group of apothecary-chemists (Setürner, Caventou, Pelletier, Robiquet, Gaedcke) investigated the vegetable alkaloids.

Op. cit., p. 164.
 Antitheriaka (London, 1745).

<sup>18</sup> Spanish flies, musk, hartshorn, coral, crab's eyes, isinglass, and sponge.

<sup>19</sup> Aqua fortis, aether, Glauber's salts, Hoffman's drops, Rochelle salt, Sal martis, and cream of tartar.

<sup>&</sup>lt;sup>20</sup> Henry M. Leicester, The Historical Background of Chemistry (New York, 1956), p. 104.

But one is constrained to say that while theory concerned the medical world of the eighteenth century, the materia medica was beginning to become more scientifically empirical than it had been. Withering and his friends at Edinburgh had subjected the foxglove to clinical tests in 1779 and after. Medical dissertations were beginning to concern themselves with the pharmacological action of drugs (e.g., camphor).<sup>21</sup> Moreover, at least three relatively new items on Smith and Moore's list had attained recognition through professional study. The noted Dr. Fothergill had introduced kino.<sup>22</sup> Dr. Hieronymus Gaub had introduced colombo,<sup>23</sup> and Dr. William Saunders was responsible for the general acceptance of the red bark. Saunders' Observations on the Superior Efficacy of the Red Peruvian Bark reached several editions and was reprinted in the United States in 1783.

Admittedly much in the materia medica, with all of the cleansing,<sup>24</sup> was still useless. Obviously, too, the practitioner did not always know what to use, or why to use it, but he could usually find a drug to perform the function he wanted done, no matter how right or wrong the reasons for his choice. This level of accomplishment the materia medica had attained. Helpful drugs were available, and most practitioners could show reasonable success given a reasonably accurate diagnosis, a proper selection of medication, a patient with a strong constitution, and a kind Providence.

<sup>21</sup> Lewis, I, 262.

<sup>22</sup> Ibid., II, 28.

<sup>&</sup>lt;sup>23</sup> Fielding H. Garrison, An Introduction to the History of Medicine, 4th ed. (Philadelphia, 1929), p. 392.

<sup>24</sup> Cf. fn. 14.