

## Reviews and Notices of Books.

*Waste Products and Undeveloped Substances; or, Hints for Enterprise in Neglected Fields.* By P. L. SIMMONDS, Deputy Superintendent of the Colonial Department, International Exhibition. pp. 430.

THIS is both an interesting and instructive book, and may be described as being a most complete illustration of the well-known proverb, "Waste not, want not." The great process of reconversion is the basis of art, as well as of nature. The latter has not any refuse material to throw away; she uses and reuses all that is left from her previous manipulations. The fruits of the earth form the sustenance of one, and the flesh of the one the food of another. The body of the other becomes the manure of the earth, by which fresh fruits are produced for the completion of a new cycle. And it is the perfection of art to run through the same circuit.

"In every manufacturing process there is more or less waste of the raw material, which it is the province of others following after the original manufacturer to collect and utilize. This is done now more or less in almost every manufacture, but especially in the principal ones of this country—cotton, wool, silk, leather, and iron. But new industries spring up from time to time, and out of the worn substances and waste of these much commercial wealth has yet to be drawn."—p. 2.

When the streets of Paris had but one gutter, and that in the middle of them, the watercourses were known to a certain class of people as "banks of deposit" for old horse-shoes, nails, and bits of copper and brass. The ingenious investigators of them, called *ravageurs*, actually made fortunes now and then by what they found therein and sold to certain dealers. Their gains in this way started them in something better, until at last they rose step by step, like M. Langlois and the Père Chapellier, to own their £5000 a year, made out of bread crumbs, matches and blacking.

"Stranger, if you ever go to Paris, never order *soupe au pain*, or *purée au crouton*, except at the Trois Frères, Café de Paris, or Vefour's. All comes from the *fabrique* of Chapellier—from the chiffonier's basket, the college scrap-basket, or the convent's slop-tub. He has established near the Barrière St. Jacques ovens which never cool, and from whence thousands of pounds of bread are daily poured forth to be sold as crumbs or crusts. A large number of men, women, and children are busy piling and grating the merchandize as it comes out of the oven. The carbonized pieces and scrapings are pounded, sifted through silk sieves, and sold to the perfumers to make tooth powder.

"Nothing is more curious than the warehouses of the Père Chapellier. They are immense buildings, where mountains of bread are received every minute. Workmen separate these pieces: on the right are those re-destined for man; on the left those destined for rabbits. Wonderful order and cleanliness are everywhere visible. Young girls make up packages of *croup au pot* after weighing them; children fill large boxes with the black powder. Le Père Chapellier himself is always present among his workmen, scolding, giving orders, laughing, joking: he is a man of genius.

"Ask anyone there about his fortune. 'Ah, monsieur!' will be the invariable reply, 'notwithstanding *all he spends on gaieties*, he doesn't know how much he's worth.'

"'About £200 a year, eh?'

"'Allons donc!' That M. Langlois, whose gilded waggons carry about his matches and blacking everywhere in Paris, has £4000 income from his four per cent. stock. He gave £4000 to each of his daughters in cash the day they were married. Le Père Chapellier has no children, and his profession is a thousand times better than M. Langlois'."—p. 17.

Few can expect to be gifted with both the genius and industry of such *ravageurs* and *ramoneurs* as these; but all can learn not to throw anything away, but to try and make the most of it. As Mr. Simmonds points out, the student in his library, the scientific chemist in his laboratory, the cultivator at home, the explorer in distant lands, the manufacturer in his workshop, can all test and prove the value of some new commodity by which in the future much good may arise to the world

Everyone can add his mite to the general stock of information; can point out or suggest some path to a useful discovery, or direct attention to the utility of some unappreciated product which may afterwards become not only of some benefit to his race, but possibly a source of vast remuneration to the discoverer.

As a history of much that has been already effected in the way of appropriation, adaptation, and reconversion, we can recommend Mr. Simmonds' treatise with confidence to our readers.

*The Levant Review*, for March and June, 1862.

THESE two numbers of this meritorious journal, published in the City of the Sultan, and under the editorship of an indefatigable member of our profession—Dr. Foote,—contain some very interesting matter. The annual reports of the Levant Quarantine Association, and of the Local Association for the Promotion of Social Science in Turkey and Greece, afford unmistakable evidence of the intelligent zeal and of the ability of our countrymen abroad in establishing and carrying out various schemes for the moral and intellectual improvement of the populations around them. In the first of these reports we find an excellent letter from the secretary, addressed to Sir James Emerson Tennent, on the advantages that might accrue from the appointment by our Government of a few medical officers of health at Cons antinople and some of the other principal towns in Turkey. Commercial and general intercourse, as well as science, would reap the benefit of such a measure. The subject well deserves the attention of the Epidemiological Society, as Dr. Foote suggests in his very judicious remarks. The report of the council of the other Association gives a most encouraging view of the good work already done by meetings, courses of lectures, the formation of a public library, and other like proceedings, all serving to promote the great cause of social enlightenment and political progress. It was only last year that our ambassador to the Porte, Sir Henry Bulwer, in his address as president, remarked, that "in this polyglot city (Constantinople), whereof the Turk, the Armenian, and the Greek are natives, and wherein the people of all the most civilized states of Europe are assembled, but one society such as ours exists, and that a society of Englishmen!" But since then the example has been followed by the Greek and Armenian communities there and in different places, as well as by our own countrymen at Smyrna, where the literary institution already possesses a considerable library, and during last winter had a course of lectures. We heartily wish God-speed to all such efforts.

*On the Mechanical Appliances necessary for the Treatment of Deformities.* By HENRY HEATHER BIGG, Ass. Inst. C.E. Part II.: The Spine and Upper Extremities. London: Churchill.

IN this elaborate description of the appliances most used in the treatment of deformities of the spine and upper extremities, Mr. Bigg catalogues and explains an extensive variety of those which are applicable to curvatures in each region, and which are constructed to afford support and to counteract vicious directions. Many of the instruments have been specially devised by the author under the control of surgeons in practice.

It is undoubtedly very desirable that the mechanical principles which govern the origin of the defect, and by which its remedy may be induced, should be clearly explained; and in no small measure this book is calculated to render that service to practitioners. To make such a book as useful as it might be, it ought to give a general survey of all the instruments applicable to the disease in question; but here we find no mention of a large number invented by other makers than the author, and generally used in practice. But the work remains to be written which shall give a more general survey of the subject which Mr. Bigg here ably treats from his own experience, and which, so far, is a valuable contribution to orthopædic mechanics.