THE

POPULAR SCIENCE REVIEW.

A QUARTERLY MISCELLANY OF ENTERTAINING AND INSTRUCTIVE ARTICLES ON SCIENTIFIC SUBJECTS.

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VOLUME I.

LONDON:
ROBERT HARDWICKE, 192, PICCADILLY;
AND ALL BOOKSELLERS.
1862.

LONDON :

COX AND WYMAN, PRINTERS, GREAT QUEEN STREET

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INTRODUCTION.

THERE is a tale told of a wealthy farmer who had a lazy and improvident son, whom he called to his bedside in his dying hour, to inform him that in a certain part of his farm he had concealed a treasure. Before he had time, however, to state the precise locality in which it was hidden he was overtaken by death, and prevented from completing the revelation.

The narrative goes on to say that as soon as the old man's spirit was departed, the son delved over every portion of his farm in search of the treasure; and in order the better to conceal his object, he at once caused the soil to be prepared for the sowing season. The precious hoard was nowhere to be found; but owing to the thorough tillage to which his land had been subjected, his first crop was so prolific that it encouraged him to further industry; and growing in substance, he forsook his indolent ways and became a wealthy and respected yeoman.

This story, which is no doubt familiar to most of our readers, is remarkably figurative of man's progress in scientific knowledge. There is another father; and one of the means employed by Him to develop the noblest powers of his children (often turning them from evil to good courses), is the appeal to their love of gain. A moment's consideration will suggest to every thoughtful reader familiar illustrations of this truth, and we venture to say that every number of this Journal will contain statements of facts by which it will be corroborated.

One example, however, appears to us more striking and appropriate than any other, and it is this:

The desire to become possessed of immense treasures induced the representatives of science, in former times, to deny themselves almost every earthly enjoyment. Secluding themselves

from society, they pored over philosophical works, and passed whole days and nights in experimenting upon the elements, and in submitting the baser metals to every conceivable process, with a view to their conversion into gold.

We have his picture before us—the old alchemist! There he sits in his vaulted chamber, upon his carved, high-backed arm-chair. His head, of which little else is visible than his long flowing hair and beard, leans upon his left hand, whilst with the right he turns over the pages of some mouldering volume in search of the "hidden treasure." Around him may be seen the emblems of his craft. In one corner is a small furnace, fitted with a primitive pair of bellows, on which stands an iron still. Mortars, pestles, crucibles, air-pumps, weights and scales, flasks, funnels, pincers, jars, and vessels of every kind lie scattered about in confusion. On a board or rude table, surrounded by these appliances, sits *the* great black cat, and, suspended over the head of the hoary philosopher, the stuffed owl with outspread wings sways gently to and fro.

They never found the hidden treasure, these misguided but persevering workers, but they broke through the hardened incrustation of ignorance in which mankind was buried in their day; and it was left for their posterity, for practical men of science, to prepare the soil, sow the seeds, and reap the golden harvest. And what, after all, was the object they sought to attain, compared with the indirect results of their labours? They desired to convert the baser into the more valuable metals.

This has since been accomplished; but so much more wonderful have been the other victories of science, that this one is barely known to the world. Who cares to be informed that whole services of plate which grace the banquets of the affluent have been wrought from silver extracted from the crude ore of lead? or that the brilliant ornaments of aluminium which adorn the persons of the fair have been tortured from a lump of despicable clay?—ay, from the meanest soil whereon you trod, and which was not deemed worthy of your regards, profound philosopher and alchemist!

What, we ask, are these benefits compared with the magic influence which lulls the sufferer to sleep and spares him all the anguish of a painful operation? or with the silent messenger that speeds from land to land with news of life and death, of peace and war, outstripping Phœbus in his course; or to the vapoury element which, when confined and controlled, bears its master on his journeys over land and sea like some mighty "Genius" of the East; or, in the stillness of night, conveys intelligence, borne on the wings of lightning from the farthest corners of the earth, and, multiplied indefinitely by this self-same power, to the home of every family throughout the length and breadth of the land.

But there is still another lesson of importance suggested by the simple story of the farmer's son.

He delved with a view to enrich himself alone, but the fruits of his toil supplied the wants of many. So has it been with regard to science. Had some alchemist been enabled through a mysterious process to convert the baser metals into gold, he would have amassed enormous stores of wealth, and with them hoarded up the secret of their production, and carried it with him to the grave.

But it has been wisely ordained by Providence that the spread of knowledge should be gradual, not only in this, but in every other particular; and the unfolding of nature's secrets has necessitated the united efforts of many minds. The principle of combination, whilst it has lightened the labours of the student, has aided materially to enrich our stores of knowledge, and the greater the harvest becomes, the more numerous will be the husbandmen. The men whose avocation it is to penetrate nature's secrets, do not now, as formerly, work alone, secluded from the world, and surrounded by mysteries impenetrable to the vulgar gaze, as were their ancestors. They vie with one another in imparting, not in concealing, information; and the thoughtful sage who spends his nights in study may be seen in the broad light of day rambling through country lanes surrounded by anxious inquirers—youths and maidens, the aged