less receipts for large sums of money to those who were silly enough to buy them, and then disappeared.

Alchemistic beliefs, or pretended beliefs, have persisted to a certain extent almost to the present day. About the year 1885, a man turned up in Montreal who professed to be in possession of a method for converting lead into gold by means of a secret powder, and he gave a demonstration of his process to which he admitted a few favored gentlemen on payment of a small fee; but he did not succeed in interesting these capitalists any further, and he disappeared, leaving behind the small piece of real gold which he professed to have produced from lead.

Gradually, however, as years passed and failure followed failure, belief in the possibility of transmutation became less and less and the workers turned their attention to other things. In particular, chemistry was looked on more and more as a valuable aid to medical men in the preparation of substances used as medicines, especially as a theory had grown up to the effect that all diseases were caused by wrong proportions in the chemical substances that made up the body; and so the doctors, who were perhaps the best educated men of the time, worked at chemistry, to the great advantage of the science.

The medical chemistry of this period is often spoken of as Iatro-chemistry.

Little by little the explanation of what takes place when things burn became the great problem of the chemists. Fire has from time immemorial been used as a test for many things, and a rough classification of substances into (*a*) those that were altered in the fire, and (*b*) those that were not, had long been in use. Among the things that were altered may be mentioned wood, grease, oils, and many metals, such as iron, lead, magnesium; and the great question was: what is it that really happens to these things when they are burned? As long as chemists considered only the *kinds* of matter involved in these changes, no satisfactory explanation was forthcoming: it was when they began to consider the *quantities* used and produced that real progress was made. Let us examine this a little more closely.