

INVENTIONS OVERDUE.

BY ARNOLD WHITE, AUTHOR OF "PROBLEMS OF A GREAT CITY," "ENGLISH DEMOCRACY," ETC.



MIDDLE-AGED people have a serious grievance against scientists and inventors. Thirteen or fourteen years ago, when the division of the electric light was accomplished, the transmission or reproduction of sound at a distance successfully effected, and the vintage of eminent men's voices actually bottled off for use after their decease—we were told that the field of scientific possibilities was only trodden at its entrance.

The rest was virgin soil. We were assured that this generation should not pass away before vast social and economic changes would be brought about by harnessing Nature to the chariot of progress. Inventors in the early eighties seemed to be engaged in a *battue* of natural phenomena. The crackle of their fire was a pleasant sound, for every man with four or five hundred a year, and even the artisan, was led to expect that when electricity emerged from its infancy, and from the electrical equivalents to measles and croup, his income would buy him in travel, comfort and health, all that a revenue of thousands had hitherto been necessary to obtain.

All these expectations have been bitterly disappointed, and many of us feel that we are the ageing victims of a heartless deception. It is true that the Maxim gun, in its way, is an invention that has made a considerable impression on many families among the coloured races. But for the average father of English sons and daughters, the Maxim gun fails to satisfy any deep desire, or to fill any want that can be honestly described as "long felt." Speaking as a middle-class *paterfamilias*, I decline to accept the Maxim or any other destructive implement even as an instalment of Inventions Overdue.

Our appetite is still sufficiently whetted for favours to come to expunge the word "impossible" from the schedule of our desires. The question is not, What is possible? but, What is wanted? By eliminating, therefore, all question of the possible or the impossible, the expectant legatees of scientific achievement are able to concentrate themselves on the palpable needs of the community, and point out to the managers and secretaries of the Bank of Nature, the forms in which their disbursements are invited. It is quite clear that there is no such thing as creation in an inventor. All he does is merely to knock off the manacles from matter, just as Praxiteles, the sculptor, chipped away the superfluous marble that obscured the pretty Venus coyly hiding inside ever since Carrara was raised from the sea by volcanic action. Now let us get to work. We must begin at the beginning.

To spend half an hour every morning and evening in dressing and bathing is a monstrous waste of time.

Three hundred and sixty-five hours, and more, annually taken from man's short span of life! The first thing wanted in these days of high pressure is a soap that shall cleanse without water, remove the nascent beard without razor or apparatus, and without injury to the skin.

The second is a new dress material, elastic, warm, and beautiful, combining the softness of angola, the beauty of cambric, the solidity of broadcloth, and the cheapness of calico, which would enable us to wear one garment and a pair of boots, instead of the round dozen, not counting the scarf pin, into which most of us have to wriggle before we can descend to breakfast.

For bathing purposes, water may still be retained, pending a better substitute, but the bath towel is an obsolete anachronism. There is a surgical wool which absorbs moisture with eager alacrity. We require a towel with more purpose in it. The torpid uselessness of the so-called Persian towel steals a slice from every man's life. Quicker dressing, easier shaving, greater cleanliness, and more absorbent towels, are the first *desiderata* in the day.

Coming down to breakfast, after a man is forty years of age, who can face the same old fare—tea, coffee, eggs, bacon, bread, butter, soles and parsley, without a sense of the hollowness of life? I like mangosteens from Singapore, caviare of sterlet from Moscow, canvas-back ducks from Washington, and the larded venison you still get in some houses of the Dutch Cape farmers.

Had science kept pace with her promise of 1880, and transport cheapened so that every spot on earth was in easy, instantaneous, and regular communication with every other spot, we should not be fobbed off with new-laid eggs produced a fortnight ago by a Russian hen, or Irish bacon that has seen no more of Ireland than the latest "bull."

However, since the means of communication have not been materially cheapened or abbreviated, and the structure of ether and matter are still as mysterious and as far beyond our ken as the origin of evil, it can hardly be denied that it is about time that inventors gave us a new vegetable, a new meat, and a new beverage. The potato is all very well, but, like literature, it is a good walking-stick and a bad crutch. We know all about it. There is a book devoted to the dressing of it in a hundred ways. I remember Professor Holub telling me in Africa, that in the Mashokolumbwe country there was a tasty vegetable that he thought might be introduced as a new invention in Europe. Let us have it. We want the flavour of the mangosteen combined with the nutritious quality of oatmeal and the cheapness of mangold-wurzel.

And the meat and poultry! Who is not weary of the eternal gamut of ox, sheep, pig, hen; hen, pig,

sheep, ox ; sheep, ox, hen, pig ? The thing cannot go on much longer. We English are not dainty as a race, but we have stood the monotony of our diet long enough, and we want a new edible flesh. Something between a donkey and a peafowl is what is needed. Both are delicious.

I am convinced that there is both money and fame for the inventor who will mend our fare, and take from us the reproach cast on us by His Majesty George the Second, who said in just indignation—

“Where'er I go, id is always ze zame, cock and hog, cock and hog.”

Fowl and ham are better than beef and mutton, but all four are somewhat ancient history. With a new bird we may fairly look for a new egg. As to the new drink, we want an exhilarating, delicious, and cheap non-intoxicant, that shall combine the stimulus of good claret, the delicacy of fine tea, the medicinal value of milk, at the price of small beer.

The evils of existing fuel are the commonplace of our philanthropic reformers. Coal is dirty, dear, dangerous to get, and has recently been the cause of a very disagreeable strike. We want a sanitary, non-political fuel. Anthracite coal would be excellent, but there are three objections. It is expensive: it is difficult to win underground, and when you get it, it refuses to burn in the Englishman's fireplace. It is well-known that within a few miles of the earth's surface volcanic fires exist in abundance, and with suitable treatment they might be coaxed into the service of men who live in great cities. An artesian well penetrating the fire stratum might be sunk in every quarter of London, and the heat thus wrung from the bowels of the earth conducted by the County Council on progressive principles into the houses of the taxpayers.

The probability is that the energy thus obtained might be harnessed to municipal accumulators, and the costly cab, the haughty serving maid, and even the tyrannous tramcar of profit-mongering capitalists, might be dispensed with if a controllable and inexhaustible source of energy, with constant flow, were always at the service of the community.

Out of doors, a noiseless, durable, and healthy pavement for the roadways is a felt want. For the space of a few feet, when passing under the hotels at Euston or the Midland Railway, there is such a pavement. Perhaps it is indiarubber, and we are told that gutta-percha is so many shillings a pound, and the thing cannot be done.

Well, let it be done. The wooden pavements destroy our throats, asphalt ought to be proscribed by the Society for the Prevention of Cruelty to Animals, and as to macadam—our nerves, nowadays, simply will not stand it. As to the granite setts that still linger in some parts of London, they are always associated in my mind with polygamy, community of

goods, and other signs of a frankly barbarous society.

My space grows brief. I must crowd into a column all that might fairly bulge a book. In short, we need—

A non-conducting metal.

A carpet material unaffected by gravitation. This would cheapen travel between England and India, not between India and England.

A process that shall effect for matter that which the telephone has done for sound:—viz., resolution into its constituent elements, and accurate synthesis at the other end of a wire. This would be an alternative to the suppression of gravitation for travelling purposes, and would develop the Parcel Post.

Colour photography.

The utilisation of earth-currents for telephony, so that (a) ships at sea could always communicate with their ports of departure and destination ; (b) registered earth-currents could be devoted to cheap international communications ; (c) the evils of exile would be so diminished as to popularise emigration.

A new material for coating ships, so that the cumulative friction now retarding ships, but not porpoises, would accelerate existing passenger vessels from 17 to 51 knots per hour.

The extraction of energy direct from coal without the intervention of steam, so that (a) ten times the energy might be available for the present cost of one horse-power ; (b) the same energy as now might be available for one-tenth of the present cost ; (c) ten horse-power might be developed from a given weight of machinery now sufficient only to develop one horse-power.

Four results of this invention would be : Practical flying ; the abolition of war ; the decay of great cities ; further restrictions in the dynamite trade.

A new telescope that shall give us an insight into the actual structure of the canals of Mars.

A cure for sea-sickness.

A graduated sleeping draught, free from deleterious consequences, and enabling us to utilise in sleep odd moments of time, and to wake with certainty at a given time.

Five hundred words of a universal language, compulsory on all European and American children.

Cheap aluminium.

A barrel organ that shall give the effect of Joachim on his Strad.

A system of indexing books that shall give to critics and busy students a fair conception of the whole.

A method of converting good men and women of fifty years of age into two of twenty-five, or three of seventeen.

These things are enough to begin with. Inventors, hurry up, please !

