To guess the future of mathematical science would be a rash attempt. If made it might seem that, in view of the extraordinary works of the human intellect which mark our age, the safest course would be to predict great discoveries in this and all other branches of science. The question is sometimes asked whether a mathematical method may not yet be invented which shall be as great an advance on the infinitesimal calculus as the latter was on the methods of Euclid and Diophantus.

So far as solving problems which now confront us is concerned, I am not sure that the safest course would not be to answer such questions in the negative. Is it not true in physics as in mathematics that great discoveries have been made on unexpected lines, and that the problems which perplexed our ancestors now baffle our own efforts? We must also remember that the discovery of what could not be done has been an important element in progress. We are met at every step by the iron law of the conservation of energy: in every direction we see the limits of the possible. The mathematics of the twenty-first century may be very different from our own; perhaps the schoolboy will begin algebra with the theory of substitution-groups, as he might now but for inherited habits. But it does not follow that our posterity will solve many problems which we have attacked in vain, or invent an algorithm more powerful than the calculus.

RECENT RESEARCHES IN ELECTRICITY AND MAGNETISM.

Notes on Recent Researches in Electricity and Magnetism. Intended as a sequel to Professor Clerk-Maxwell's "Treatise on Electricity and Magnetism." By J. J. Thomson, M.A., F.R.S. Oxford, Clarendon Press, 1893. 8vo. pp. 586.

POINCARÉ remarks in his "Électricité et Optique": "La première fois qu'un lecteur français ouvre le livre de Maxwell, un sentiment de malaise, et souvent même de défiance se mêle d'abord à son admiration." And again he says: "Le savant anglais ne cherche pas à construire un édifice unique, définitif et bien ordonné, il semble plutôt qu'il élève un grand nombre de constructions provisoires et indépendantes, entre lesquelles les communications sont difficiles et quelquefois impossibles." The disconnected way in which Maxwell takes up one hypothesis after another, and then leaves his readers to select for themselves, is naturally abhorrent to a great