

force could only take with them a powerful piece of artillery, the difficulties of such expeditions would vanish.

Perhaps one of the most efficient ways in which guns of paper or very light metal might be used, would be by their adaptation to tricycles. If two men could propel, by their own energy, a double tricycle fitted with a light aluminium gun, the artillery might be made almost independent of horses. Some recent experiments at Aldershot showed that velocipedes carrying some twenty or thirty soldiers could easily be developed into a very useful arm of the service for occasions where very rapid marching was required. If cycle-guns could be made practicable, the terrible difficulties encountered by the General who has to find, first his horses and then their forage, would be very simply got over. We may see the time when cycle-batteries will be a feature of every army, and when that most striking of sights, the horse artillery coming up at the gallop, will be nothing but a memory. It is not, however, in artillery alone that the effect of an invention like "Sleetover" would be felt. One of the great difficulties of the repeating-rifle is its weight. If, however, the barrel could be made of sheet-tin, or aluminium just thick enough to keep its shape, the weight saved might be utilised by adding to the charge in the magazine, and a rifle that would fire thirty shots in succession might conceivably be produced. A curious feature of the new explosive is stated to be its cheapness. The cost of "Sleetover" is said to be only one-tenth of that of ordinary gunpowder. This, however, is not a very important consideration, for the money required for gunpowder, were it sixty times as expensive as it is, would always be forthcoming. The nature of the new composition is stated to be at present a profound secret. If it turns out a success, we very much doubt its remaining so. Some workman, or, as it is in Russia, perhaps some high official, will betray it. If not, a hint will be traced out by some ingenious chemist anxious to benefit the world. Sooner or later, it is sure to come out. It is possible, of course, that the Russians might keep it till the outbreak of a war—in war-time the secret must be divulged, for some of the cartridges would certainly be taken or found lying about, and the contents analysed—and might gain thereby a great advantage. But would any Power dare to enter on a struggle using the new gunpowder alone? Till tested by actual war, no one could say positively if it would really answer. Probably, therefore, no army would venture beyond an experiment, and a mere experiment would render them no real assistance. New devices in war show about an equal record of success and failure. The Prussians founded their supremacy on the needle-gun. In 1870, the French utterly failed to effect anything with their boasted Mitrailleuses. If "Sleetover" is a reality, it may possibly turn out like the needle-gun. It is equally possible that it may, for some unforeseen reason, be utterly valueless; but rumours about weapons of war are usually derived from experts by no means credulous.

EXPERIMENT.

AMONG the many signs which meet the eye everywhere of the triumphant progress made by Physical Science in our day, none is more striking than the way in which the notion of scientific method has invaded the realm of moral and political relation. A few years ago, to say that any proposed measure affecting the welfare of human beings was an experiment, would have been more or less of a warning. Now it is becoming almost a recommendation. No doubt the Reformer was always ready to make experiments, as compared with the Conservative; in one sense, every new law is an experiment. Nobody can say exactly how it will turn out. But in former days, nobody wanted to pass a law in order to see how it would turn out; and while that is no very great exaggeration of the popular attitude already, every day makes it less of an exaggeration. The attraction of novelty is intensified by the attraction of what we may call constitutional research, and we are more and more approaching a state of things in which this seems a legitimate object of legislation. The idea of Experiment blends insensibly with that from which on scientific ground it is almost inseparable of progress, and its application to the realm of morals and politics has come to seem almost natural. Instead of asking whether a new measure be good or bad, people look upon it as something that can only be judged when it is tried. Perhaps nobody says openly either to himself or others,—“We know nothing about Federalism; let us try it, and see how it turns out.” But much that they do say is the expression of belief which would be most simply put in that form. The desire to make political experiments lies at

the root of a great deal of argument that is felt very conclusive, and a great deal of inclination and impulse that does not come to the point of defining itself as argument at all. It is constantly felt, indistinctly and inconsistently perhaps, but with a real influence on action, that the best way of dealing with even unwise importunity is to yield to it, as the only way of proving it to be unwise. And in our day, people are always glad of excuses for yielding to unwise importunity. They would not be befooled—we can use no more civil word—by the notion of experiment in legislation, if it were nakedly before them; but it mingles with many other temptations, and adds to their strength very considerably.

No influence that good and thoughtful men can feel is more disastrous to all the objects of the statesman, whatever his political creed. We have allowed it to be the temptation of a Reformer; but the true Liberal may be called upon to resist it quite as earnestly as the true Conservative. For if it is the peculiar danger of the Liberal, it also supplies the caricature which most effectually disguises his true aims;—legislative aims perhaps even more imperilled by an impartial change made on the chance of its turning out well than are those of the Conservative, because changes that turn out manifestly ill are material for Conservative argument. But, indeed, the method is so hostile to all the interests of a nation, that it is impossible to say what part of a nation will in the long-run find it the most fatal. Nor is its baleful influence confined to political ground; the attraction of experiment spreads wider and penetrates deeper than even to the roots of that national life which it so grievously endangers. There are men who desire by this means to rearrange an older group, and try its effect on the family. They are probably not numerous, but their influence is certainly not despicable. For while their own motives are often pure, and purity of motive is strength, they feed and stimulate impulses, of all that are known to the heart of man, the most unquestionably evil. They are, as it were, soaking with spirits the woodwork in a powder-magazine. The metaphor may be thought unfit to express any result of the cold light of science; but, in truth, not the fiercest passion supplies so perilous an influence in the relation of man to woman—that realm of sacred silence—as does the desire to know. The integrity of the family, more even than the integrity of the nation, must perish, if we give it up to the spirit that tests all integrity. That will not prove anything except what we know already,—that men and women are weak, and that some temptations are very strong.

Cervantes, in his story of the husband who destroys the fidelity he seeks to test, depicts and rightly entitles as “Impertinent Curiosity,” the attempt to discover moral fact in our dealings with each other by means of action that has no other aim than this discovery. Even now most men see this clearly where it is a question of individual relation; but they are often cheated by the idle fancy that persons, arranged in groups, approximate to things; so that experiment is more possible in the national than the individual relations of mankind. It is worth spoiling a diamond to show that it is an identical substance with charcoal; nobody afterwards says,—“Perhaps it was not a diamond then, and perhaps it is not charcoal now.” If that were the only result of the experiment, surely it would not be worth the value of the smallest diamond that ever sparkled on a lady's finger. We sacrifice a gem to an experiment, not only because truth about things is more precious than things, but because it is separable from things. It is not worth sacrificing the poorest human being, or the smallest human group, to the student of social and political science, because you cannot in like manner separate truth about human beings from the human beings themselves. If we surrender our country to the spirit of experiment, and replace Great Britain by some revival of the Heptarchy, opinion will remain divided as to the change, just as it is now. One side will still say this is the true nation; another side will feel that the nation has perished. And if we could conceive that the more audacious experimentalists who would bring in an open polygamy instead of our present ideal of marriage could carry their aim, no controversy would be thereby brought one hair's-breadth nearer its conclusion. A change in human relation, when it passes from the present to the past, does not quit debateable ground and become the classified property of science. The doubtful must be doubtful still.

Unquestionably we must all act in doubt. Action means entering upon that region where doubt intrudes as moisture on

the atmosphere. All who enter on human relations must trust each other; and faith—the certainty of principle—would cease to exist if it lost that atmosphere. It might be something very precious, but not what we mean by Faith. But among wise men, action measures conviction. Doubt checks action, and does not inspire it. Experience, like experiment, finds, indeed, the certainty it does not bring; but what a moral gulf separates those two forms of the same word! All that we mean by Experience—the knowledge of humanity, the knowledge of self—would be shut off from one who sought to experiment in human relation; man and man, or man and woman, would not know each other any the better for trying experiments with each other. For they must begin by abjuring that spirit of faith which as certainly binds man to man as it binds man to God. Those who see no Father in Heaven still surely feel that “lead us not into temptation” is a fitting prayer to address to the brother on earth; and what is temptation but testing? Those who look upon the idea of a superhuman Adversary as a dream, will often concede that he has come nearest the idea of such an Adversary who has sought to “sift” his brother “as wheat.” That which we seek so to separate into the chaff and the grain must lie beneath us as things lie below persons, as man lies beneath God; and when man makes the attempt with man, he can only destroy, not investigate.

The temptation to extend the methods of the laboratory to the material of history, however disastrous, is for our generation inevitable. We have seen light thrown on a problem far more mysterious than any in politics by a few experiments in pigeon-fancying, such as in the pre-Darwinian era were never thought of, even by those who shared what we have learnt to call Darwinian views; and it was impossible that experiment should not, in consequence, take a new dimension of meaning. Science is responsible for the temptation, but she brings no danger against which she does not supply an antidote. It is clear before we reach the moral world, that not all truth is matter for experiment. The mathematician knows a truth which he loses who strives to test it, just as well as the moralist does. If we made the attempt, we should build up theories on data supplied by the shaking hand and the failing eye; we should state the errors of sense as the demonstrations of science, and honeycomb with exceptions the primeval rock of absolute certainty. This danger seems to have been the only result of physical science visible to the philosopher of the ancient world; only by this shadow was the existence of the orb, to us so brilliant, made manifest to the discernment of Plato. He saw that experiment would be fatal to the only scientific truth he knew, and he declared that it would be fatal to all truth. We have inverted his error, and our mistake is the more disastrous of the two. But within our intellectual life itself lie the warnings against its own temptations, and the history of science shows us again and again how difficult and how necessary is that inversion of mental attitude, that change in the direction of our anticipations to which all men are reluctant, as, in truth, it is one of the most arduous efforts they can make. The scientific teacher of the seventeenth century had taught men to see unity where they had imagined difference. Newton said in effect:—“The laws of the heavens are the laws of earth; you have been imagining that one influence detaches an apple from its stalk, and another whirls the planets through space; but the two are but different illustrations of a single power.” And not long after Newton’s death, Science inverted her own lesson, and bade her pupils see the many behind the one, as through him she had bid them see the one behind the many. The chemist who argued against the discovery of chemical combination would have seemed to be merely carrying on the lesson of Newton. ‘You are,’ he might say, ‘imagining that one influence detaches an apple from its stalk, and another separates those particles of matter too small to be visible; but Science has hitherto made progress by assuming the laws of movement to be the same for small masses and for large, and it is more philosophical to assume that she will continue on the same lines.’ And the teaching surely would have been as plausible as we see it to have been false. How hard, under the influence of Newton, to believe that laws of movement were *different* for small masses and for large! May not those who see that the difficulty, if men had yielded to it, would have ended the progress of chemistry, learn to expand the lesson of science beyond the boundaries of science, and discern that a similar refusal to invert the attitude of anticipation, a similar rigidity in keeping hold of one principle and neglecting the rhythm of intellectual

movement, would—if such a thing were possible—end the progress not of a part of science, but of Truth itself?

LETTERS TO THE EDITOR.

PROFESSOR DICEY ON UNIONIST DELUSIONS.—VI.

[TO THE EDITOR OF THE “SPECTATOR.”]

SIR,—Unionists of repute believe or hope that the demand for Home-rule may at this moment be met by giving to Ireland a system of extended Local Self-government. This opinion is one which any Englishman harassed by the perplexities and annoyances of a bitter political controversy would adopt with pleasure. It is, however, open to three cogent, not to say fatal, objections. These objections shall be stated by me with all the brevity I can command; my letters have already occupied too much of your valuable space; my views on the subject in hand have been already laid before the public in another form.* Let me, however, request of candid readers that summariness be not mistaken for dogmatism.

First.—Home-rulers demand not Local Self-government, but Home-rule. No one ever satisfied a claim by giving the petitioner something which was not the asked-for boon or right. Local Self-government and Home-rule, though the ideas easily admit of verbal confusion, are two radically different things. Local Self-government, as applied to Ireland, means the delegation by the Parliament of the United Kingdom to Irish local bodies, such as town councils, county boards, vestries, and the like, of strictly subordinate powers of legislation for definite localities. Home-rule means the creation of an Irish Parliament with authority to govern Ireland, and to govern Ireland freed from the direct control of the Parliament at Westminster. A Home-ruler desires the political recognition of Irish nationality; it is vain to fancy that he will be satisfied with improvements in parochial or municipal administration. There is, indeed, no necessary connection whatever, though the English public find this hard to understand, between State-rights and Local Self-government. An Irishman might with perfect consistency hold that Home-rule is the cure for Irish misery, and yet maintain that to increase the power of local bodies would work irreparable evil to Ireland. It is quite possible that an Irish Parliament would vastly increase the powers of the Irish Executive. The French democracy has invariably approved of centralisation, and it were rash for an Englishman to pronounce that Frenchmen are wrong in thinking a strong administration beneficial to France.

Secondly.—It is open to the gravest doubts whether the extension of Local Self-government would benefit the Irish people. If Irishmen, indeed, wished for an increase in the authority of local bodies as for a thing desirable in itself, the existence of the wish would *prima facie* afford a strong argument in favour of its gratification. No proof, however, has been given that Irishmen hold that the country would be better governed if every Irish town council, or vestry, had twice the powers it at present possesses, or if elective county boards administered all the affairs of each county. The Parnellites would no doubt welcome increased municipal franchises; for any increase in the power of local bodies would diminish the power of the English Government. But there is nothing whatever to show that sagacious Home-rulers, and still less that Irishmen who are not Home-rulers, deem that an extension of the authority possessed by local bodies would in itself be a blessing to Ireland; there is fair ground for the supposition that it might be a curse. Local Self-government requires for its beneficial action the existence of at least two conditions. The inhabitants of the township, or other locality called upon to exercise self-government, must, in the first place, have acquired habits of independence, of honesty, and of taking active trouble in the management of their own affairs. The different classes, in the second place, of the self-governing community must be on terms of neighbourly confidence. Whether these conditions exist in Ireland, I leave to the judgment of my readers. Where these conditions do not exist, local government is but another name for parochial incompetence, parochial tyranny, and parochial corruption. The rule of high-toned officials is possibly inferior to the self-government of a community which chooses for its administrators the ablest and most honest of its inhabitants. But the administration of competent officials is far better than Local Self-government carried on by local busy-

* See “England’s Case against Home-rule.” Chap. 2.—Meaning of Home-rule.