for assault and battery. As the extra-legal appeal to force gradually dies out, the equally extra-legal appeal to opinion takes its place. And so it is with nations also. In the first place, every appeal to international law is really an appeal to opinion. International law is certainly not law in the same sense as common, civil, or canon law, because there is no common superior peaceably to enforce it. An appeal to the law of nations is much more like an appeal to the laws of honour than it is like a suit at the Assizes or in the County Court. If one party contumaciously refuses obedience to either law, the aggrieved party must either submit in silence, or appeal to force. But, besides all this, there seem to be signs afloat of bringing the direct power of opinion to bear upon international affairs. There is a state of things in which you neither fight your enemy nor go to law with him, but simply cut him dead. It is not so very long since we saw an example of a nation being cut in like manner. England had no ground of war against Ferdinand of Naples; but his Government was thought too disreputable to associate with, and so we diplomatically cut him. Perhaps, to be perfectly consistent, we ought to have cut one or two other Governments at the same time. But neither nations nor individuals are always perfectly consistent. Men have, before now, been known to tolerate conduct in a duke for which they would certainly have cut a neighbour of their own rank. Still, this is a case of bringing direct social opinion to bear on national affairs. The King of Naples was given to understand that he was not fit company for other Kings, and he was treated accordingly.

That appeal to physical force which always lies in the background in all national affairs supplies another reason why nations are more strict and litigious than individuals in asserting their rights, and why they are praised for being so when individuals would be blamed. The trustee feeling above mentioned has a good deal to do with it, but it is not all. It is manifest that, in a state of things where force is the final arbiter, a nation which shows that it cannot be safely trifted with is in a much better position than one with which liberties may be taken without fear of punishment. It seems to follow, then, that the law of morality for nations and for individuals is not exactly the same. The cardinal obligation of justice is always exactly the same, whether for a single man, for a corporation, or for a whole people. A nation, not less than an individual, must do right and keep its word. But some of what we may call the ornamental virtues are allowed much less space in international than in personal dealings. A nation may often be generous; but nothing but the strictest obligations of justice can call it to be self-sacrificing or self-denying. There is no room for works of supererogation; it is enough if it keeps in good faith to the letter of the law. It must never be unjust or unfaithful, but it may well be more guided by a view to its own advantage, less considerate of others, more suspicious, selfish, exacting, and obstinate than a perfectly virtuous man will be. A nation, in short, is seldom called upon to play the part of a hero, or to exercise any high degree of cosmopolitan patriotism. It is commonly enough if it recognises the just claims of others, and does not put forth false claims of its own. In short, the morality of nations is much the same as the often-maligned morality of corporations. It is the fact that the whole world is mapped out among nations, while only a small part of any country is mapped out among corporations, while only a small part of any country is mapped out among corporations

## THE EDINBURGH REVIEW ON THE SUPERNATURAL.

NEDUCATED men class all phenomena of which they have any conception under three heads. There are, first, familiar phenomena, such as the falling of an apple to the ground, which they do not think require any explanation; secondly, strange and striking events, such as a great national pestilence, or the sudden death of a healthy man, which they regard as the results of a special interposition of Providence; and, lastly, miracles, and the supernatural generally. This classification is, of course, made very roughly, and, in most cases, quite unconsciously; but it is, nevertheless, certain that, in their eyes, every event which they observe, or can imagine, would come under one of these three heads. The uneducated man, therefore, does not explicitly recognise any such thing as a law of nature. Implicitly, it is true, he does. If he were asked why an apple falls to the ground, he would probably answer, "because it is natural;" and if pressed for an explanation, would give it in some nearly identical proposition, such as that it always does fall, and must as a matter of course. In this answer there lies hid, no doubt, the notion of a natural law; but this notion has not with him assumed any explicit shape. It is this absence of any desire of finding a law which marks, above all things, the contrast between an uncultivated and a cultivated mind. A cultivated mind craves, in every case, a rational or scientific method which may connect and underlie phenomena. Where a scientific method is not attainable, it contents itself with an unscientific method; but it does so with an uneasy spirit, and haunted with a desire to seize the hidden clue, which a true imagination tells it must be somewhere discoverable. We have seen this strikingly exemplified in almost every province of thought. Naturalists have long collected species upon species of every kind of animal, and have arranged them by their external marks, or, where possible, by their internal organization; but they have been possessed by the longing to discover some more

inspires the physical philosopher in his researches into the nature of magnetism, electricity, and the laws of chemistry; and the same tendency is observable, in some degree at least, in the half-philosophical, half-theological discussions which are at present in vocus.

An article on "The Supernatural" has recently appeared in the Edinburgh Review, in which an attempt is made to bring miracles, to a certain extent, into the common category of natural phenomena. Of the three heads under which the uneducated classify events, science has long ago united the two first. On the one hand, she brings the falling of the apple under a general law, in spite of its familiarity; and, on the other hand, she brings plague and sudden death under general laws, in spite of their strangeness. Miracles remain, and it is now attempted to bring these into the same list. Hitherto, the human reason has had its choice of two courses in reference to miracles. It might either deny them, and say that the accounts which we have are the products of delusion or imposture, or it might bow the head, and admit that its domain is limited. But the Edinburgh Reviewer thinks that he has discovered a middle way. He believes in miracles, but denies that they are supernatural. Superhuman he admits them to be; but this he holds to be something quite distinct and different from supernatural. The latter word, he thinks, implies that the laws of nature are suspended or violated, whereas the former only implies that they are applied in a certain way by the Divine will; and he contends that our only or chief difficulty in conceiving a miracle arises from our supposing without any reason that it involves a "violation of the laws of nature." To sum up in his own words, "The intellectual yoke involved in the common idea of the supernatural is a yoke which men impose on themselves. Obscure language and confused thought are the main causes of the difficulty."

The case which the Reviewer puts is this. Man, he says, is acquainted with a certain number of natural laws, and is able to acquainted with a certain number of natural laws, and is able to use this knowledge so as to bring about certain results. Civilized man can accomplish things which to a rude people appear miraculous, and in all probability with the advance of knowledge his power will be immensely increased. God acts in the same way. He knows all the laws of the Universe, and He uses this knowledge to work what are called miracles, just as man uses his knowledge to produce results which are not miraculous. Now if, he goes on, there is nothing which can be called supernatural, or a violation of the laws of nature in the case of man, why should we suppose that there is in the case of God? A miracle is superhuman, but it is not superthe case of God? A miracle is superhuman, but it is not supernatural or a violation of the laws of nature. This is, we believe, a fair summary of the Reviewer's case, and it is worth while to consider whether the sceptic's difficulties are really smoothed, as the writer imagines, by this way of putting the matter. In the first place, we may observe that, in the position thus taken up, a verbal question and a real question are involved. If we admit, as a special interposition of the divine will, which could not be effected by man, and which would not have happened in the ordinary course of things, it is clear that, whether we prefer to call it supernatural or superhuman, is a merely verbal question. The importance which the Reviewer attributes to the word "supernatural" is, in fact, a signal instance of a difficulty brought on by that confusion of language against which he protests. He begins his article by a discussion upon the meaning of the word, and, in order to get at this, he is obliged to analyze the meaning of the word "nature." He comes to this conclusion:—"We must conword "nature." He comes to this conclusion:—"We must conceive it as including every agency which we see entering, or can conceive capable of entering, into the causation of the world. First and foremost among these is the agency of our own will and mind. Yet, strange to say, all reference to this agency is often tacitly excluded when we speak of the laws of Nature." It may be remarked, in the first place, that if by nature or natural things is meant every agency which we conceive capable of entering into the causation of the world, then it is not true that first and to remost among these is our own will and mind. true that first and foremost among these is our own will and mind. Obviously, to any one who believes in a God, first and foremost would be the will of God. If, as we presume the writer meant to do (though quite inconsistently), we exclude the notion of a God, then in one sense of the word "nature," it is true, that first and foremost comes our own will. But the surprising thing is, that the Reviewer should have observed the inconsistency in the use of the word "nature," to which he adverts, without at the same time fairly recognising that the word is used in two ways, each of which is equally common. In one sense, the word is used, as stated by him, to include man and his agency; and here "the natural" stands in opposition to "the Divine," or "supernatural." In another sense the word is used to exclude man, and here "the natural" is used as opposed to "the artificial." So far from there being anything strange in the latter use of the word, it may safely be said that, in ordinary language, it is the more common of the two. Did the Reviewer never hear a person say that he preferred nature to art, or that the poet leaves the city to commune with nature? Here the agency of man is excluded from and put in opposition to the notion of nature, but there is nothing strange or inaccurate in this way of speaking. The Reviewer quotes rather inaccurate in this way of speaking. The Reviewer quotes rather contemptuously "a distinguished living lecturer upon physical contemptuously "a distinguished living fecturer upon physical science," who fell into this supposed error, when he remarked in a course of lectures upon heat, that "there is no spontaneousness in Nature;" but, if instead of carping at this remark, the Reviewer had set himself fairly to consider it in all its bearings, it would have led him to a solution of the difficulty. Coloridge has a similar observation in the Aids to Reflection:—"In Nature there is

inclination, promises an amount of friction considerably below that which is inevitable in an Armstrong breech-loader. A careful comparison of the velocities obtained by the different methods would be extremely valuable as one element in the choice between the two systems of rifling.

Another question which requires a complete solution, and would obtain it from a carefully-planned competition between the two guns, relates to the form of the projectile. The flatheaded shot is, we believe, Mr. WHITWORTH'S invention, though, in comparing the different guns, it must be borne in mind that "flat-heads" can be adapted to either. Under some circumstances, there seems little doubt that this is the best form of shot for penetrating iron plates; and to the flat front and hard material of his projectiles the principal triumphs of Mr. Whitworth have been mainly due, as was very clearly proved, in the last experiments, by the utter failure of a cast-iron shot, under the same conditions which enabled the steel bolt to penetrate through everything opposed to it. But the great problem now is to find an arm which will be effective at very long ranges; and careful experiments are needed to ascertain at what distance the flat-headed bolt loses its superiority over the roundfronted projectiles which are more commonly employed. The great power of the flat-fronted bolt is intelligible so long as the striking face is nearly perpendicular to the line of flight; but a long cylinder fired from a rifled-gun always points in the direction in which it started, while its line of motion keeps inclining more and more downwards. The flat end of such a projectile, therefore, ceases to be strictly a flat front after the first instant, and there must be a certain range at which the direction of impact becomes so much inclined to the axis of the bolt as to render the flat front no more effective than if it were round. This promises to impose a limit on the penetrating range of Whitworth guns, and it should be one of the objects of any official experiments to ascertain at what inclination, and what range, the virtues of this form of shot are practically neutralized. Even at 800 yards, some deficiency of power was anticipated from this cause; and this has been so far obviated by adding a small round boss to the centre of the flat end of the bolt. Whether this arrangement will suffice at extreme ranges is a question of the first importance, which ought to be solved without delay.

Besides the mode of rifling and the form of shot, there is another essential difference in principle between Mr. Whitworth and Sir William Armstrong. This relates to what is, perhaps, the most important point of all—namely, the method of enabling a gun of given weight to bear the explosion of the heaviest possible charge. Sir WILLIAM ARMSTRONG has adopted and perfected the plan of building his guns of coiled metal forged into a solid mass. Mr. Whitworth professes to obtain greater strength by using a mass of homogeneous iron bound round with hoops of the same material. Each The coils are apt to separate and system has its dangers. stretch if there is the slightest imperfection in the work, and the homogeneous metal occasionally belies its name by being of very unequal and heterogeneous composition. But, without entering further into details which may be thought wearisome, we have said enough to show that, independently of the secondary personal question, there are the highest scientific reasons for instituting a series of experiments for the purpose of comparing the Whitworth and Armstrong guns, and, it may be, of devising a combination which shall unite the excellences of each. The contest is invited by both competitors, and demanded by the interests of the science of gunnery; and it is to be hoped that no official obstacles will prevent or delay the thorough and complete trial which all who are interested in artillery are anxiously expecting.

## VIRTUE IN RETIREMENT.

COURTLY poets have bestowed such lavish praises on the pleasures and dignity of living away from the Court, that it has become accepted as a commonplace that virtue in retirement is virtue at its best. The violet is then under the proper sort of mossy bank. Nor are popular historians ever weary of recounting how great heroes have been taken from the plough and from goat-bearing rocks to govern States and lead armies. And everyone must allow that virtue does often shine most in retirement. A man who has done his active work in the world, and withdrawn from the busy haunts of men to the tranquil pursuits of a country life, is only enjoying the reward he deserves in the shape he likes best. There are, also, men who think best and most when in solitude, and whose peculiar genius is never under their command unless they are free from care and interruption, and social pleasures and annoyances. We can hardly fancy that Wordsworth would have been Wordsworth if he had been condemned to live in Pentonville.

But in many cases virtue loses greatly by being out of the world; and the very advantages which retirement is supposed to ensure are those which are least found practically to attend it. A calm judgment is, we should suppose, that reward of the voluntary or enforced assumption of the position of a bystander which would be thought most certain to be attained. The good man in seclusion would also be generally supposed to have at least the blessing of an easy line of duty. His path, if it is so simple and unpretending, must be straight before him. On the contrary, experience, if we will but consult it, will teach us that the judgment of good and able men in retirement is almost sure to be tinged with bitterness, and swayed by the facility of yielding, unchecked, to fancies and prejudices. It will also teach us that there are many occasions on which it is much harder to act rightly and worthily when in the shade of retirement than when in the sunshine of publicity. The temptation is so strong to many men of lofty aspirations, but of hasty temper, to withdraw themselves into isolation, that it is worth while both for them and their neighbours to notice what is the penalty for their taste which their neighbours to notice what is the penalty for their taste which

their neighbours to notice what is the penalty for their taste which they are likely to pay.

Perhaps as good an illustration of some of the evils of retirement as can be found is supplied by the history of the Orleans party during the last ten years. Their seclusion from public life has been involuntary, but the effects of seclusion may be seen equally, whatever may have been its cause. And what makes their history so instructive is, that they have, if judged by any fair political standard, acted well and behaved honourably. They have presented a striking contrast, in many important respects, to fair political standard, acted well and behaved honourably. They have presented a striking contrast, in many important respects, to the satellites of the Imperial Court. They have represented the intellect of France, and kept up its reputation in Europe. They still preserve, in the circles of Paris life, something of the old freedom, and life, and grace in conversation. They still think in an unthinking age, and write for a generation that is almost destitute of literature of its own. Were they less men—less in mind and less in chargeter—they would not show uses clearly whet losses and less in character — they would not show us so clearly what losses their enforced retirement has imposed on them. As it is, in spite of all their great and good qualities, they are almost powerless. They do not exercise any perceptible sway over the thought of their country. They interfere indirectly in politics; but they only do so to render dark things more dark, and to add a few drops of feeble bitterment to the transfer of the state of th render dark things more dark, and to add a few drops of feeble bitterness to the draught of humiliation presented to the lips of France by her master. Their judgment, far from being powerful because calm and impartial, is powerless because it is angry, wayward, and capricious. They cannot judge so as to convince and move the world, because they are cut off from any real control over public affairs. They are but part of the mob which hisses or cheers as the Emperor goes by. They have backed up the temporal power of the Pope—feebly and irresolutely, but still they have backed it up—not because they had a word of wisdom to utter to listening Europe, and a wider view of a great and difficult question to promulgate, but because they found the Emperor was leaning to the other side. It would be most unfair to apply this censure to all the members of the party, and the Orleans Princes especially have presented an admirable spectacle of moderation and dignity; but still, as a party, the Orleanists have been very far from doing themselves justice since they were in retirement, and their retirement itself is the most obvious cause of their failure. their failure.

If the history of these eminent Frenchmen may be used to If the history of these eminent Frenchmen may be used to show how little seclusion, whether voluntary or not, can be relied on to give calmness and equity to the judgment, the history of English statesmen supplies copious illustrations of the truth that being out of power brings with it almost as many difficult problems to solve, and as many temptations, as power itself does. The biography lately published by Lord Stanhope, of the greatest of English statesmen in modern times, presents Pitt swimming along in an attitude of unruffled serenity as long as he held office. But when his long reign was over, then, for the first time, he gets along in an attitude of unruffled serenity as long as he held office. But when his long reign was over, then, for the first time, he gets into difficulties which make the reader anxious for the hero's reputation, and which force the biographer to exert his utmost skill in order to give a favourable impression. He succeeds, and we come to the conclusion, that Pitt's honour was unsullied, and that when he was severely tried, he did not give way to trials with an unmanly readiness. Still it is evident that Pitt had difficulties to contend with when he was severed of office which were produced. contend with when he wasout of office which were much more severe contend with when he was out of office which were much more severe to him than the graver cares of power. To a man of his lofty courage and aspiring mind, it was a far more acceptable task to have to spur his country to make its utmost efforts in war, and to play with millions of money as if they had been marbles, than it was to shade off the nice distinctions of duty which arose from the conflicting claims of old friendship for Addington and devotion to England. To most men, indeed, the greatest difficulties of life lie in small things, and not in great; and it is often much harder to instil sense and temper into a suburban village meeting than to announce the policy of a Ministry, or to preach a sermon with thought in it that is not second-hand. It is true that a man who is in retirement, and has only to face in his daily life with thought in it that is not second-hand. It is true that a man who is in retirement, and has only to face in his daily life people greatly inferior to him, and aware of their inferiority, may easily escape all those shocks which are brought about by a collision with equals. A virtuous and misanthropical peer can usually reckon on being able to bully his village. But any one who does not see, without explanation, the evils which an atmosphere of humble flattery engenders, would probably be incapable of comprehending them, even if they were explained with the astonishing fulness of a commentary on Virgil or the Bible.

The country clergy probably know as well as most men what