## THE PREVENTION OF WAR.

## C. D. BROAD.

**N** July 10 of the present year the New Statesman issued a special supplement on the Prevention of War.<sup>1</sup> It was prepared by Mr. L. S. Woolf for the Fabian Research Department: and it is, so far as I know, the only good thing that has up to the present resulted from the war. But it is a very good thing. Pacifists (among whom I number myself) tend to have a very serious defect. They tend to forget that other people are not and are not likely for many years to become as sensible as themselves about international questions. Now it is no more use to argue for pacificism on the assumption that other people are going to be very reasonable, than it is to argue for free trade on the assumption that most nations will shortly become free-traders. If pacificism is to be of any practical use it must enunciate and defend a course of action which is likely to appeal to people most of whom are full of national and patriotic sentiments, however evil and silly we may consider such sentiments.

Now Mr. Woolf has steered his course with extraordinary ability between the rocks of idealism and the shallows of cynicism. To the cynic on international matters—the man who takes his knowledge of history from the Sunday papers and his maxims of human conduct from Mr. Bottomley and similar moral teachers—Mr. Woolf presents masses of historical evidence for the comparative success of many international agreements and for the fact that the vast majority of them have been kept even in the present war. E.g., in spite of the great advantage in modern warfare of an unannounced attack none of the belligerents omitted the formality of a proper declaration

<sup>&</sup>lt;sup>1</sup> "Suggestions for the Prevention of War." Special to New Statesman, Vol. V, No. 118, London, 1915.

of war; and each belligerent is so convinced of the importance of international law as to spend endless ingenuity in proving to itself and to neutrals that it is acting in accordance with law and that its enemies are flouting it. And, on the other hand, as we shall clearly see, Mr. Woolf is under no illusions as to the reasonableness of mankind in international relations. His scheme abounds in options, alternatives, and mere permissions in place of commands, to meet the actual jealousies and egoism of nations.

One other merit, closely connected with that just mentioned, must be noted before we proceed to give an outline of Mr. Woolf's scheme. Discussions about international questions suffer to an aggravated degree from the defect to which all political discussions seem liable, viz., that they abound in sweeping generalisations made on the most flimsy of data. The whole subject is enveloped in clouds of what an eminent moral philosopher of my acquaintance terms "loose gas." Mr. Woolf's great merit is that he is never vague; all his statements are most carefully guarded and historical chapter and verse are given for every one of them.

Mr. Woolf begins by disposing of the commonplace that people always will want to fight, and that so long as they do so it is useless to try and find a substitute for war. He replies that very few people want to fight under normal circumstances: we may remark that within a few days of the war many English papers were against our intervention (including that very representative journal Punch) and the German Social Democrats were holding meetings in favor of peace. But, if disputes be allowed to drag on, a moment comes when people do want to fight, or can be very easily made to think so by interested persons; and then war is inevitable. Thus, while it is true that if everyone always wanted to fight wars would be inevitable, the fact is that most people generally do not want to fight, and machinery is needed for settling disputes before they give rise to the psychological conditions under which alone civilised people will fight. Mr. Woolf also

cautions us against thinking that the present war is something unique in anything but size and cost; to think of it as "the war that will end wars" or as "the end of all things" is simply to repeat a fallacy of historical perspective which has been committed by the contemporaries of every other striking event.

Having shown that there is nothing intrinsically absurd in his task, Mr. Woolf proceeds to analyse the most usual causes of wars. We may suspect that disputes which arise from one kind of relation between nations will be capable of a mode of settlement which will not apply to those which arise from relations of another kind. He distinguishes four kinds of relation which may lead to disputes. (1) Legal relations (boundaries, interpretation of treaties, etc.); (2) Political relations (subject races, etc.); (3) Economic relations, and (4) Questions of honor. We may remark in passing that (2) and (4) are not always easy to distinguish; that all other disputes if not quickly settled lead to (4); and that it is chiefly when people can be persuaded that questions of honor are involved that they can be got to fight. I think we ought to add that people are sometimes moved to fight over abstract questions of right and justice where neither their own interests nor honor are involved. No doubt the motives of most Englishmen who wanted us to fight Germany were very mixed, but I am sure that many people were more moved by the purely abstract question of the violation of the neutrality of Belgium and the alleged cruelties of the Germans in that country than by any other consideration. This is of course a morally reputable motive, however much it may lend itself to hypocrisy, and however carefully it ought to be checked by the consideration whether intervention will really do more good than harm to the injured third party in particular and to humanity in general. This motive is also peculiar in the following respect. If we are to have a reasonable society of nations all the other motives must as far as possible be weakened, but this motive must be strengthened. Nations must be much Vol. XXVI.-No. 2. 7

less prepared to make sacrifices for their supposed interests and prestige and much more prepared to make them for the maintenance of abstract justice and the sanctity of agreements if an international authority is to have the power over recalcitrant or dishonest nations which the state has over its hooligans and rogues. At present a patriotic man is much oftener one who wishes his country to be as grasping as a miser and as touchy as a *parvenu* than one who would like it to show that forbearance and unwillingness to insist on one's extreme rights which are the marks of a Christian gentleman.

We must now consider the various kinds of international assemblies and their functions which Mr. Woolf enumerates, and the analogies between them and the internal institutions of a single state. We may distinguish first: Congresses or conferences and tribunals. These correspond to the legislature and the judiciary of a state. But legislatures have two different functions: they make and alter the constitution of the state and they promulgate general laws for regulating the relations of citizens. E.q.the House of Commons acted (as we may say) as a Convention when it passed the Parliament Bill and the Home Rule Bill; it acted as a Legislature when it passed the Insurance Bill. Now, Mr. Woolf says, since the Congress of Vienna there have been international bodies fulfilling each of these functions. The Congress of Vienna itself acted as a legislature when it laid down the rules for navigable rivers; and the Geneva Convention acted similarly when it laid down certain rules of war. Perhaps the main error of congresses acting as legislative assemblies has been to deal much more with rules of war than with rules of peace. War being a state of affairs when people are morally at their worst and mentally scarcely responsible for their action, rules about warfare have the maximum chance of being broken; and the breach of them reflects a certain discredit on all rules laid down by international authorities. Moreover one cannot help feeling that there is something slightly ridiculous in the matter of many of the

rules of war, and that they must largely be defended on the classical grounds given by a college tutor-after all there must be rules of some sort. It is difficult to believe that apart from the rule it is very wicked to poison soldiers without blowing them to pieces but perfectly harmless to poison them if you also attempt to blow them to pieces. And a rule which it is only wrong to break because you have agreed to keep it is almost certain to be broken in any time of stress. Congresses have been most successful when they have acted as makers and alterers of the Constitution of Europe. The Congress of Vienna, as we know, did not shine in this respect. In the first place it hovered between two incompatible theories; one that Europe was to be a confederation of states, and the other that it was to be under the hegemony of the four great powers. The other difficulty was one that still threatens to wreck efforts at peaceful settlement of difficulties, viz., the fact that states as at present constituted do not coincide with racial and national divisions. Internal troubles may threaten the peace of Europe, but no European nation cares to allow outside interference in its dealings with its own subjects.

Mr. Woolf argues that a satisfactory international constitution can hardly be made until there is some general agreement as to the treatment of races as opposed to states. Yet it is difficult to imagine any strong nation like England, or Germany, or Russia allowing interference with its treatment of Irishmen or Poles or Finns. Nevertheless he sees in the diplomatic history of the nineteenth century distinct traces of the development of a view that the internal affairs of a state are neither (a) entirely its own business nor (b) the business of any one other state, but that (c) they are the business of Europe as a whole if they begin to threaten the general peace. In support of this opinion he quotes (i) the setting up of the Greek kingdom against the wishes of Turkey; (ii) the settlement of the difficulty (about foreign recruiting of insurgents) between Greece and Turkey in 1869; (iii) the Balkan question and the

Russian intervention of 1876-78; (iv) the neutrality of Luxemburg; and (v) the Morocco question of 1905.

It is of some importance to consider these cases in a little detail to see what conclusions they really support. Mr. Woolf admits that in the main the powers maintained in theory the view that they were only mediating between sovereign states. But he argues that they really meant more than this. The destruction of the Turkish fleet at Navarino was a rather strong "suggestion to a sovereign power"; and the Greek boundary question was settled against the wishes of Greece and Turkey by armed force. He argues that in every case except one (the Russo-Turkish war) the conference managed to keep the peace (a) between the nations with whom the dispute started and (b) between the interested nations (e.g., England and Russia) who were among the powers intervening. And the breakdown in the seventies he considers makes for rather than against his view in two ways: (a) Russia only went to war with Turkey when the conference rejected her suggestion that they should unite to enforce their decisions. *i.e.*. when the conference *refused* to act as an international constitutional authority; and (b) when Russia tried to play for her own hand the powers insisted on acting as an international authority and compelled the revocation of the treaty of San Stefano. This is true enough, but it is necessary to insist on three points if we are not to overrate the analogy between these historical examples and the internal procedure of states. (1) The plan was most successful when the nations whose relations were dealt with were weak and backward as compared with the rest. The only apparent examples of great powers submitting to the decision of a conference are Russia. when she was exhausted by the Turkish war, and France over Luxemburg and Morocco. In the first case she had hardly recovered from her defeat by Prussia; in the second she was in no condition to face Germany. Thus none of the examples are very good instances of a really strong power bowing to the decision of a majority because it believed

such action to be right. (2) The weakness of the analogy also comes out in the fact that, as Mr. Woolf admits, Greece and Turkey were not represented at some of the conferences that had the most important influence on their relations. (3) Nevertheless we must not forget that the analogy here is with *constitutional* questions in a single state. Unless we can say that the behavior of the Ulster minority over the Home Rule Bill wrecks the view that any changes in the constitution of a state can be brought about without civil war we have no right to hold that the fact that in Mr. Woolf's examples nations generally gave way only to *force majeure* wrecks the possibility of peaceful acceptance of international legislation.

On the general question of conferences as legislatures and as constitutional conventions Mr. Woolf comes to the following conclusions: (1) Generally conferences have only settled details when the basis of settlement has already been agreed upon by previous legislation. This is undesirable. The question whether a dispute shall be referred to a conference or not ought not to be a question for negotiation, but this procedure ought to be insisted upon. On the other hand, as we shall see. Mr. Woolf holds that it is unreasonable to insist that nations shall abide by the decisions of a conference on all subjects. (2) It seems essential that something less than absolute unanimity shall be demanded in order to make the decision of a conference binding. The rule of unanimity has generally been defended as the only one consistent with the independence of sovereign states. But this is merely a means of making all conferences nugatory from the beginning. As we may perhaps put it, though the antecedent volition of a nation is to get such and such a decision, its consequent volition, if it honestly enters a congress, is to abide by the decision of the congress; hence its consequent volition is not contradicted and its sovereignty is not abrogated if the decision be contrary to its antecedent volition. With Mr. Woolf's attempted solution of the problem: How to represent each nation in a conference

in such a way that it is reasonable for each to accept a majority decision—we will deal later.

At present let us consider his views about international tribunals—the analoga to judicial bodies in single states. With these are clearly connected the questions of arbitration and treaties. Treaties are comparable to contracts between individuals in a state. Now difficulties may arise over treaties in three ways. (a) There is no recognised judicial authority to interpret treaties when disputes arise as to their application to particular cases; (b) There is no authority to enforce them; and (c) Circumstances change and treaties may become unfair. Yet the maintenance of the status quo may be to the advantage of one party who will insist on it, while it may be disadvantageous to the other party and to humanity-e.g., France and England have a great interest in maintaining the status quo in the Low Countries. Germany had a great and growing interest in upsetting it. This does not make France and England specially virtuous and Germany specially wicked, but it produces a state of affairs very hostile to peace. An unalterable treaty is, like an unalterable constitution, the surest means of war; for it may legitimately become intolerable to one of the parties and there will be no way of changing it except by an open breach and the risk of war. The suggestion has been made of fixed time-limits in treaties. The advantage is that they provide a fair means of altering treaties with altered conditions. It can hardly be part of the eternal order of things that Belgium and Holland must be independent because it would be dangerous to France and England to have Germany seated there. But it would be grossly unfair if Germany is to alter the arrangement, as she tried to do, just at the moment most convenient to her. A time limit allows a fair and peaceful alteration. But it has the grave disadvantage that it raises afresh a thorny question which has perhaps with difficulty been set at rest; and the time just before a treaty comes up for reconsideration would always be a time of especial uneasiness.

One of these difficulties, it seems to me, could be avoided if it were arranged that the question could only be reopened at the stated intervals if one of the parties gave notice that he wished it reopened. Unless the grievance on one side were very great both parties would probably prefer to let sleeping dogs lie.

But the main interest of treaties for Mr. Woolf is that they necessarily transform vague political relations into legal ones and thus make arbitration possible. As long as there is no recognised judicial body to interpret them in disputed cases this does not greatly help us towards peace, but once such a body is constituted the existence of treaties is a great guarantee of the possibility of peaceful settlement for certain differences. We will therefore turn to Mr. Woolf's views on arbitration. This section is perhaps the most important in the paper. High hopes have been built on compulsory arbitration, yet most of us can see that there are certain disputes which it is not reasonable to refer to arbitration. Mr. Woolf makes two very important distinctions here: (i) between two quite different senses of arbitration, and (ii) between the kinds of disputes that are and those that are not suitable as subjects for arbitration. An international arbitration court may be expected to do either of two things: (a) To decide on questions of law and fact; (b) To give a fairminded judgment in settling some dispute that cannot be reduced to legal terms.<sup>2</sup> Now it is to be noted that it is only in cases of the first kind that arbitration has been successful. Nations are prepared to submit questions that can be stated in terms of law and fact to an international tribunal and to abide by its decision; they are not prepared to bind themselves to accept its decisions in other cases. Mr. Woolf points out that this applies even to the Alabama arbitration; the principles of law were first formulated by negotiation in the Treaty of Washington; the subsequent

<sup>&</sup>lt;sup>2</sup> Cf. the case of an arbitrator in an industrial dispute deciding (i) whether an agreement between master and men had been broken, and, if so, by which party; and (ii) deciding on a fair minimum wage for the industry.

arbitration only considered facts and assessed damages. And this enables us to see that compulsory arbitration for *all* questions is absurd, and that it is only reasonable for disputes that can be stated in terms of fact and law. We also see that this is the true distinction between arbitrable and un-arbitrable disputes, and that the *fundamentum divisionis* is not "questions involving interest and honor" as the diplomatists have claimed. The Dogger Bank arbitration involved questions of interest and honor in the most acute degree, but the dispute could be stated in the form: What actually happened, and who was to blame, and to what extent?

Mr. Woolf's scheme with regard to compulsory arbitration is as follows. Disputes on any of the following five questions are suitable for arbitration: (i) Questions of fact, (ii) of titles and boundaries; (iii) of interpretation of treaties and international law, of claims founded on these and on alleged breaches of them; (iv) of responsibility or blame of national agents; (v) of certain pecuniary claims. But, although such questions are susceptible of arbitration. Mr. Woolf would not compel arbitration even on them because of the vagueness of international law and the partly justifiable distrust to which this leads. His plan is to compel the parties to a dispute on any one of these five questions to accept the option either (a) of an arbitration or (b) of calling a conference. The party demanding the conference must then state whether it wishes the conference (a) to settle the whole matter or (b) to state the principles on which the arbitration court is to decide and leave the application of them to court. In any case both parties would be bound to accept the final decision whether of the court or the conference on questions of the five kinds mentioned above.

Mr. Woolf says that the court is to determine its own competence; and that there is no special difficulty about this, for courts are constantly called upon to settle such questions. It seems to me, however, that a difficulty might arise here. Suppose that *both* disputants denied that their controversy was exclusively concerned with questions of the five kinds enumerated by Mr. Woolf as arbitrable, is the court to consider this point automatically, and if it finds that the question is of one of the five kinds to insist on arbitration or a conference? This difficulty can, however, be met, I think, when we consider the further development of Mr. Woolf's plan and the establishment of an international authority.

In the meanwhile we have to consider the question of a permanent court of arbitration. Mr. Woolf considers that this is necessary, for otherwise nations who do not want to arbitrate or to submit to a conference could avoid doing so by objecting in turn to every form of arbitration and conference proposed. We therefore need a permanent court to which questions of these five kinds shall be automatically referred if the disputants cannot agree on any other method of settling their differences. But, apart from this function, Mr. Woolf considers that the importance of a permanent court has been exaggerated by pacifists. He thinks it important that nations should not be tied down to a single method of settling their differences, for we want to have as much experience as we can of various possible methods of peaceful settlement. Hence we only want to make reference to the permanent court compulsory if the disputants can agree on no other method that they would prefer. With regard to the constitution of the court Mr. Woolf thinks that it should be permanent so that a tradition of interpreting international law may grow up. Again the difficulty will arise that each sovereign state must have a representative, that there are many more little and backward states than large and progressive ones, and that we may fairly doubt the capability of states like Haiti and Siam producing competent international lawyers in large numbers. The decisions of the court must go by majorities and so the controversies of great and civilized states might be settled by a majority of votes from small and barbarous ones. To this Mr. Woolf replies that the small states will have to give up something, and that it is to

their interest to do so because they have more to gain than anyone by the substitution of law for force in the settlement of international disputes. He propounds several schemes for forming a court on these principles; all of them have been discussed at the Hague and seem reasonable enough; and one has actually been accepted for the constitution of an International Prize Court.

At this point I may mention a difficulty that strikes me. Suppose that two nations agree that their dispute falls under one of the five heads, but that one wants it settled by arbitration and the other wants a conference. So far as I can see on Mr. Woolf's scheme if the nations could not agree the matter would automatically be settled by arbitration by the permanent court. This may be the best way out of the difficulty, but it gives a great advantage to a nation like England whose interest it is to take a very conservative view of international law and to insist as far as possible on the maintenance of the status quo. I do not see how a treaty that has become oppressive to one party is to be altered if the other whom it benefits can, by obstinately refusing to allow a conference, force the appeal to the permanent court which is necessarily conservative. Of course if a peaceful decision is to be insisted upon the option must ultimately be closed automatically on one side or the other, and it is perhaps better to favor the conservative side in the last resort. We now come to the concluding point of Mr. Woolf's scheme. This is the establishment of an international authority, and the rights and powers that can be given to it. It is essential in Mr. Woolf's opinion that the general procedure for settling international disputes should be agreed upon once and for all and should not be a matter for separate negotiation in each case. But this is compatible with making the procedure itself allow various options to the disputant; and indeed it is only by doing this that we can expect nations as at present constituted to be prepared to bind themselves to submit to one general method of procedure. Mr. Woolf's irreducible minimum is that nations should bind

themselves (1) to set up an international tribunal, (2) to refer all questions of the five heads mentioned above either to a conference, or to an agreed tribunal created *ad hoc*, or to the permanent court. If they fail to agree on any other method they *must* refer these questions to the permanent court. (3) To refer *all* other questions to a conference for examination and report. They must agree to accept the decisions of the conference, special tribunal, or central court in case (2); but they need not do so in case (3) if the question affects either (a) territory, (b) internal laws and institutions, or (c) independence. The option of war *after* reference to a conference is thus left open on those questions which most deeply stir people at present, and this seems necessary if nations are to enter into this general undertaking with any intention of keeping to it.

If a permanent international authority were established one of the difficulties that I have mentioned would be eliminated. If two nations had a dispute and both thought that it involved other than arbitrable questions they would still have to refer it to the international authority for discussion and report. If it were anywhere near the line between arbitrable and non-arbitrable questions the authority could then ask the permanent court to decide whether it were arbitrable or not. If the court decided that it was the disputants would be compelled to accept arbitration or a conference whose decisions would be binding; otherwise the international authority would proceed as in the other non-arbitrable questions to report and suggest. Similarly I imagine the permanent court would have to decide in doubtful cases whether a dispute did affect territory, internal laws and institutions, or independence; and consequently whether the decision of the international authority was binding.

The question now arises: How is the international authority to be constituted? The difficulty which we found in constituting an international court where a majority decision shall be binding recurs here in an aggravated form. Decent people do not object to their nation being bound in decisions on fact and law by a majority of jurists from small states except on the ground that it is rather improbable that the jurists from small and backward states will be as competent in their business as those from the great nations. But much stronger sentiments are aroused when we deal with the submission of a great state to a majority decision on questions that are not wholly ones of law and fact. This strong feeling is partly legitimate. Small states form a class whose members have certain peculiar and sometimes undesirable interests and characteristics. and they might vote together on non-legal questions under the sway of these special interests. And again we might easily get a large majority of the people in the world forced to obey on doubtful questions the representative of a small minority consisting of the most backward of peoples. On the other hand, it seems essential that the members of the authority should represent governments and not peoples; for, as Mr. Woolf points out, there is a homogeneity between the governments of all civilised and even semi-civilised peoples which is totally lacking between the peoples themselves. It is therefore essential to weight the representatives of each government in some way (e.q., by giving them so manyvotes) that shall roughly correspond to the importance of the people whose government they represent. Mr. Woolf suggests a method of doing this based on that agreed to by the Hague Conference in constituting an international prize-court. We may add, what Mr. Woolf does not mention, that it will be necessary to have some arrangement for periodically overhauling these "weightings" and that these periodic overhaulings will lead to very delicate questions, e.g., the representative of Japan would need to have a very much larger number of votes to-day than he would have had fifty years ago.

How far ought such an authority to be backed by force? We may impose legal and moral obligations on nations; but we need not sanction *all* of them by force but only the most important ones. Mr. Woolf suggests that the authority ought to be given power to enforce the following obligations: (1) That of referring all unsettled disputes to a tribunal or conference, (2) That of abiding by the decisions of a tribunal and (3) That of abiding by the decisions of a conference called *ad hoc* by two states as an alternative to appealing to a tribunal. On two other points we might recognise a moral and legal obligation; but, in the present state of affairs, might refuse to enforce it: (1) The obligation of abiding by the decisions of the permanent authority on all points not involving territory, independence, or internal laws and institutions; and (2) That of abiding by general rules of law (not affecting the above three points) that the authority may from time to time lay down by a majority vote.

This is the essence of Mr. Woolf's scheme which is well worth the consideration of all sensible and well-willing men. I will conclude by a very few further remarks.

(1) I should like to see the international authority and the permanent tribunal given one power not mentioned by Mr. Woolf. This is something corresponding to the power of punishment for contempt of court by newspapers and speakers. As soon as a matter is referred to a tribunal or conference or to the international authority it ought to be regarded as sub judice; full, genuine, and quite colorless reports of the proceedings from day to day should be provided for the newspapers, but all comments by them and by public speakers should be suppressed till the matter is decided. I think that there would be little difficulty in carrying this out. The newspapers of each state would be under the control of their respective governments and liable to criminal proceedings if they broke this rule. Responsible public speakers could easily make it a point of honor to refrain from comment while the question was sub judice, and irresponsible ones could be suppressed by the police. I see no hardship in such a procedure and I am sure that it would make enormously for peace. The press of Europe is at present a public danger in its comment on international affairs; it is partly under the control of sinister interests which want war, and it partly lives by keeping people

in a fever of suspicion and patriotic heroics in which every international question is distorted and a state of mind favorable to war (and to the circulation of newspapers) is fomented. Nothing of the least importance will be lost and much will be gained if in place of all this hectic nonsense people are provided with a perfectly cold report of the actual proceedings; those who only want sensations will be too bored to read it, those who want information will be able to get it without the labor of constructing it from contradictory emotional absurdities. It is the absolute worthlessness of matter and motive of most of the most popular newspapers that makes one doubt the wisdom of some of the otherwise attractive proposals of the Union of Democratic Control. Sir Edward Grev and Herr Von Bethmann Hollweg may fall far short of our ideals, and their methods may strike us as dangerous and antiquated, but we may reasonably believe that their standards of morality and intelligence compare favorably with those of the average English or German newspaper proprietor.

(2) Of course Mr. Woolf's scheme will not of necessity prevent war, and he does not suppose that it will do so. Even if every nation always acts in perfect good faith the scheme leaves room for war as a last resort. And there always is the possibility that nations will not act in good faith, but will be tempted by some supposed immediate advantage to go to war without the preliminaries which this scheme imposes on all nations that agree to it. But we may fairly admit that it would provide an enormously strong check against war, and that if it were once put into force and had settled successfully a number of difficulties (which with any good luck and good will it would do) it would grow in strength with every success. Action in accordance with it would finally become habitual; the forces making intentionally and unintentionally for the state of mind under which alone wars are possible would be held in control by it and by my suggestion about the press; and we might fairly hope that there would be few cases where national passion rose so high as to break through it altogether.

(3) Lastly we can see that, if the international authority is to be provided with any punitive powers either military or economic, it is essential that a majority of votes shall always represent a large preponderance of military or economic force; for otherwise it cannot enforce its decisions. This provides another reason for scaling down the votes of the representatives of small and backward nations by some kind of "weighting" such as Mr. Woolf suggests.

C. D. BROAD.

ST. ANDREWS UNIVERSITY, SCOTLAND.