ught to be ready, and highly trained army ervice for the defer legislation; and the lecturer has put be nose two methods is luntary effort?"

have pronounced in system a fair trial. trial. I admit that ices to the Volunteers

nt time to be adele proposition, and has shown that the in this country ime, and he has said, olunteer system puts

uite aware that I nisapprehension on had pledged itself oice: No, no; it has because I thought at it had. I do not car equate training, whempulsory system at if the people could re possible, I should, e, Watney, and Seely, I do not believe the pressure of comany men go into the anything better. That hen they have served them into the street ning to me every day long as twelve years,

they enter into it? ter it for patriotism er it for patriotism, ely in the time given properly when all that a year—(No, no)-icient.

h to put it down as rong of me to do It has been stated teers, and also by ords and in the Cit volunteers get is a reserve for the reason why I say I training with the

ion if they would measures the right thing to apable of bearing ke themselves should arise. do not wish to deink the last speaker d compulsory ser-period of service of ve, have the same me problem of men term of service was

the are now becom-that we must look our fellow-citizens duty, remembering Mr. Dawson ha arkable because it because it was a ome many thoughts recruits, to stir up ome in on a volun

was a good deal of I to introduce rifle-olsan Werknow very House of Commons tary training at all. ne out in jority in favor of a ning, a majority in ning schools. That by the 113 men ht, who are against e. vou may sleep

got to educate in allow their men to the employers of or and pleasure of will find that there they help in every and to make it as in the Swiss Naose chiefly of Ger-but the vast matheir men wherknow that in some ide by the employything like a Na-uctive.

as an evil, and we

pe difficult to bring nel Watney's plan ncies or recruiting ause, after all, the in the men to give ne to service. It is done here in Engmind. The Swiss ence between what rvice and what the in the Yeomanry se who serve in ke it as a pastime; they see on the may at any time d. Besides being rown homes, they or what is theirs. country owned a to say, "I will keep mening 500 ten maining 500 ten entually own that for myself." He for myself." He he National Army th before, because n homes. At the ght for. It is very n see what a hard t recruits for the have struggled the Yeomanry. Thy? Because we the reason why

ve their country.

what they are

try, and precisely mething to go on, in the Territorial intry. As an As ssist this scheme; tion, and we have better one could ing the prosperity wing and assured, est part in making duty that it is our efore them.

cretary): Those eral meeting this ociation is on the We have hitheriscussions which era. But now we iments and con eneral public, and eneral public, and ence popular opin-ropose to abandon mean, of holding the year, followed discussions on subjects relating to national dewould like to say a few words as to the extreme ilness of this side of the work, because we have complaints from members that they do not think the discussions which are held in private do good in moulding public opinion, and because many people have written saying that it does the least further the objects which the Asso-has at heart, that we should come here and ourselves into a state of patriotic ecstasy.

Now, in the first place, we have all of us learnt a great deal from Mr. Dawson's most admirable er. We shall all of us take back with us tonight very much that is new and which may well give us

on the degree. On misside, too, Mr. Dawson will, I
am sure, feel that he leaves this room tonight the ser for having exchanged views with us, just as we nefited greatly from exchanging views with

Take, for instance, the figures which he has given with regard to the actual number of men in this intry who do undertake military service of one kind other. Mr. Dawson has put the percentage as low 11 per cent. Statistics, of course, are puzzling But there can be no serious doubt that Mr son has greatly underestimated the patriotism of ellow-countrymen in this respect.

There are two authorities who have carefully gone to the figures bearing on the point. One authority culates that nearly 60 per cent, of the able-bodied heir country either in the army, navy, Auxiliary orces, or the police. The other authority places the verage as high as 70 per cent. In any case, we may ake it as an absolute and assured fact that, notwith-tanding all the disadvantages under which the voluninding all the disadvantages under which the volun-per service has suffered in the past, not 11 per cent. Mr. Dawson imagines, but somewhere between 60 d 70 per cent. of our ablebodled male population ve, at one time or another during their lives, done mething—I do not say it is enough—but have cone mething in the way of fitting themselves to defend air country in arms. Now that I think is a most country in arms. Now that, I think, is a most related fact, and one that is very material to the cet of Mr. Dawson's Paper. If Mr. Dawson reses me to produce my evidence I shall be delighted do so, the more so because if I can succeed in him to accept these figures as even approximate the will. I think he almost as much y accurate, he will, I think, be almost as much debt of the Association as we are in his; for be more imbued with that spirit of optimism as Colonel Cave has said, is the only thing can make a national army "go" under any syssory or voluntary. there are two other examples which I would give you tonight of the usefulness of these Papers of ours and of the discussions which

e have by means of discussions, achieved two notable successes during the past year. In the place we have definitely persuaded Mr. Balfour cede somewhat from his extreme position in of the "Blue Water School." That is a notable extrement, and it is an achievement which has red with considerable force upon people of very military and naval authority in this country. I meat military and naval authority in this country. I m told that even so expert and high a body as the committee of Defence has heard rumors of the disussions which have taken place in this room on "Blue Water Theories," and has taken steps, at any rate, to revise the statistics upon which it based its original opinion. That is a piece of good work.

Mention has been made tonight of Sir John Fisher, and of his notorious speech at the Mansion, House

Mention has been made tonight of Sir John Fisher, and of his notorious speech at the Mansion House et us recail his exact words. He urged his hearers o sleep quietly in their beds" and to pay no attention the alarmist doctrines of ridiculous leagues and associations. I have no doubt that Sir John Fisher, hen he was talking in that way, had the National efence Association chiefly in mind. Centlemen it is when he was talking in that way, had the National's Defence Association chiefly in mind. Gentlemen, it is surely a notable achievement that this association should have induced the great opponent of its theories to think it worth while at the Mansion House to mendian, even though disparagingly, the efforts which the association has made to probe to the bottom the falcies of the "Blue Water School." You may be certain if he went out of his way so to depreciate them he was following the example of our ancestors a hundred years ago, whose broad sheets, lampoons, and cartoons on Napoleon are well known. Our ancestors were in reality horribly attriate of Napoleon; they certainly believed to the full in the possibility of invasion. But they kept their spirits up by vilipendying their great adversary, depreciating his warlike provess, and the would never dare to land upon their shores, and, if he did, they explained what a warm reception he would get. In reality, they knew that if the great solution did you have dealered that the did, they explained what a warm reception he would get. In reality, they knew that if the great solution did you have the did in invading it would be the first province of the did get. In reality, they knew that if the great sol-did succeed in invading it would be all up with

But, like Sir John Fisher in dealing with the Association, they were boastful and contemptuous. The neasure of their boastfulness was the measure of heir secret fear of Napoleon. So it is with Sir John Fisher, who is more alarmed than he likes to admit it the influence which our discussions are having at the influence which our discussions are having upon public opinion and, let us hope, will ultimately have upon public policy.

Mr. A. J. Dawson: I should like to mention, gen-Mr. A. J. Dawson: I should like to mention, gentlemen, that it was of set purpose that I twice quoted the present Prime Minister this evening. I had been given to understand that the National Defence Association sociation was a strictly non-political body. I profoundly conscious of the fact that I am a Unio a Conservative, and a Tariff Reformer, and this so ardently that I belong to the class who feel that the integrity and safety of the Empire depend upon the eventual application of the present programme of the Unionist and Tariff Reform party. Remembering this, and that I was addressing a strictly non-political association, it seemed to me to lay stress upon the exand that I was addressing a strictly non-political association, it seemed to me to lay stress upon the expressed view of the leader of the Liberal party where
that view bore out the one I was trying to set forth,
rather than to quote the utterances of members of the
other great political party. Also, to my great regret,
I am unable to find a record of any utterance of Mr.
Balfour's which expresses what I regard as so sound Balfour's which expresses what I regard as so sound a view in the matter of national defence as this one of Sir Henry Campbell-Bannerman's, in which he claims that the task of defending his country and home

claims that the task of defending his country and home ought to be regarded as the duty of every man.

Two other points have been raised, and one of them I have to confess that I do not understand even now, though the gentleman responsible for it was good enough to repeat it for my edification, so that the fault is clearly with me. I think, but I am not certain, that it was Colonel Seely who, in the course of his highly interesting remarks, made a comparison between the number of men who volunteered for military service in this country and in other foreign between the number of men who volunteered for military service in this country and in other foreign countries. But where I failed to follow Colonel Seely was 1s to whether he said that more men volunteered for military service in this country than in any other, or that more men volunteered in other countries than in this. The voint is not, perhaps, important, but it seems to me that all the men in what are called conscript armies are in reality volunteers, since the people of those countries, or most of those countries, which employ conscript armies enjoy representative government, and therefore make their own laws—the laws which make it incumbent upon every able-bodied man among them to undergo military laws—the laws which make it incumbent upon every able-bodied man among them to undergo military training. In our army, on the other hand, very many of the rank and file cannot properly be called volunteers, I think, because they enlist from lack of any other means of obtaining bread-and-butter.

other means of obtaining bread-and-butter.

The more important point to which I want to refer was suggested to me primarily by the remarks of the Secretary of the Association, and to some extent also by what Colonel Seely said. The Secretary of the Association, in traversing a statement of mine, stated that the percentage of our people trained for defence was actually between 60 and 70 per cent. The secretary, further, very kindly offered to supply me with statistics proving this, and I shall be very glad to have them. The point is a very important one. I should like to quote from my paper the statement which the secretary challenged. It was this:

"In that country (Switzerland) the percentage of

"In that country (Switzerland) the percentage of soldiers to all males of military age in the whole populace is no less than 67 per cent. You are doubtless aware that in Great Britain it is under 11 per

Commenting upon this, I understood the secretary Commenting upon this, I understood the secretary of the Association to say that my statement was so hopelessly incorrect that what I called 11 per cent. was in reality between 60 and 70 per cent. I agreed heartly with the secretary of the Association in the bone that I might leave this room a wiser man there hope that I might leave this room a wiser man than when I entered it; and that we all might. That I take when I entered it; and that we all might. That I take to be the object and purpose of such discussions. But gentlemen, I should have to leave it a very much more credulous man than I entered it if I left believing that my figures were so grossly at fault. They were drawn from a very sufficient source which were drawn from a very authoritative source, which I shall be happy to go into with any member of this Association. My comparison, you will note, was between "the percentage of soldiers to all males of military age in the whole populace" of Great Britain and of Switzerland. I said that in the one case that percentage was II, and that in the other it were. centage was 11, and that in the one case that per-prepared to abide by that.

prepared to abide by that.

The secretary, as I understood him, states that the British percentage is between 60 and 70. I repeat that my authorities inform me that it is 11. I refer not to policemen, nor yet to boys who belong to rifle brigades, but to soldiers, to men efficiently trained to arms; and I repeat that, to the best of my belief, the percentage to all males of military age in Great Britain is f1, and in Switzerland 67; and, I may add in France 68 per cent., in Germany 66 per cent., and in Austria-Hungary 45 per cent. If, gentlemen, if I believed that the secretary of the Association was even approximately justified in his criticism of my figures, I should hold the opinion that such associations as this one were wholly superfluous, and that it was a mere impertinence for myself, or anyone else, to prepare papers upon such a subject as "The Citizen's Duty in Defence" in this country. If it were true that between 60 and 70 per cent. of our men in this country received training which made them efficient as soldiers to take part in national defence, I should say that we might indeed "sleep safely in our beds," and adopt Sir John Fisher's attitude toward such associations as this one, which I gather to be that they are making a great fuss about nothing and secretary, as I understood him, states that the beds," and adopt Sir John Fisher's attitude toward such associations as this one, which I gather to be that they are making a great fuss about nothing, and that, with regard to national defence, all is well with us in the best of all possible worlds. But I most em-

phatically do not believe anything of the sort; and if I did I should hesitate to express so strange a belief in the face not only of the grave and urgent warnings of our greatest military leaders and Royal Commissions on Defence, but in the face, for example of much that I have heard here tonight from military authorities gathered about this table.

All my conjuctions provide me with a feeling of

ties gathered about this table.

All my convictions provide me with a feeling of profound mistrust, and even antagonism, regarding the "Blue Water School," of which a good deal has been said tonight. But, gentlemen, it seems to me that there are other schools of thought which are equally harmful and dangerous; and, to my astonishment, one of them seems to receive eloquent support from the secretary of this association and from Colonel Seely. The latter gentleman I understood to state that there was no such thing as anti-militarism in this country, and that if the English Channel were to dry up tomerrow the people of this country would "spring to arms" at once, and that, therefore, the people are all right. I think myself that the people are a

"spring to arms" at once, and that, therefore, the people are all right. I think myself that the people are a great deal better than many of their political leaders would lead one to suppose in the matter of national defence—that they are really ahead of their leaders in this all-important matter and waiting for a lead. But I cannot see that their springing to arms would benefit the nation much in an emergency if they had never undergone any military training. That whole idea that bravery or patriotism will suffice us, even though it has no practical training behind it, seems to me the most dangerous among the delusions under which we labor as a nation; the most dangerous of the illusions fostered by what I venture to call the "All's Well School" or the "Spring-to-arms, School;" own brothers, gentlemen, as I see them, to the "Blue Water School." I cannot help thinking that a school of thought which tends to the spread of an idea that all is well because our people are sound at heart, and would "spring to arms" in the event of invasion or if the channel were to dry up, or the idea that under our existing system of defence anything like the arms as the second of the existing system of defence anything like the arms as the second or the existing system of defence anything like the arms as the second and the existing system of defence anything like the arms as the second and the existing system of defence anything like the arms are second and the existing system of defence anything like arms. the channel were to dry up, or the idea that under our existing system of defence anything like 60 or 70 per cent. of our men are trained to take an efficient and practical part in national defence—that such a school of thought is for the resilient. of thought is far too perilously like the "Blue Water School" to merit for a moment the support or countenance of the National Defence Association. But of course, in this, as in everything else I have said,

of course, in this, as in everything else I have said, I am merely putting forward the personal view of an outsider, a member of the general public.

Sir Lepel Griffin: I should like to say I meant no reflection upon Mr. Dawson. I only wished to emphasize the fact that I consider Australians and Canadians so entirely English that I wish them to bear their share of the common burden. their share of the common burden.

The Earl of Erroll (Chairman): Gentlemen,—I do not know whether it is in order that the Chairman should say one or two words to wind up, but I can assure you I shall not question my own ruling as far as the time-limit, because I do not mean to keep you more than a few moments.

I should like, in the first place, to disabuse the mind of Col. Bevington of the fact that this association is entirely opposed to voluntary service. I think if we approach this question as practical men, while if we approach this question as practical men, while some of us may be in favor of universal service, some of us may be entirely in favor of voluntary service; but I think we are allowed to have an open mind on the subject, so long as we approach the subject in a practical way and try to do the best we can under the circumstances. I believe that Mr. Balfour, on the occasion on which he spoke for us, did more or less repudiate what he had said before as to the "Blue Water School." Of course, that is not known to the country, because it has been our custom not to have reporters present. That is a circumstance which cuts both ways; it enables us to get the real views of poliboth ways; it enables us to get the real views of politicians, but at the same time it does not enable us to send them forth to the public, which we should like

Sir Lepel Griffin referred to the training of youths, and suggested that the present government, at any rate, was unfavorable to any military training in the schools; and I should like, from that point of view, to say that Colonel Cave suggested that the Japanese were able to learn their military duties quicker than the people in this country. That is, I helieve, because military training is taught in all the Japanese schools, and begins about the age of ten. What I think marks the disinclination of people to serve in the Army or Auxiliary Forces in this country is very often a confusion which exists in their minds between individual and natonal freedom. I do not think that they ever seem quite to realize that if the latter was to go the former would go automatically by the board at once.

The Lecturer said something about those who are Sir Lepel Griffin referred to the training of youths, Lecturer said something about those who are The Lecturer said something about those who are willing to serve having to serve at the price of those who are not willing. The only remark I would make on this new Territorial scheme, which we are all pledged to support, whether we believe in it or not, is that a willing man who joins the Volunteers, if he leaves within four years without good reason is fined that a willing man who joins the Volunteers, if he leaves within four years without good reason is fined five pounds. I believe if he is absent on mobilization he is fined twenty pounds! Now it seems to me that we are fining the wrong man. I think it is very hard for the man who has shown some sort of public spirit to be fined at all, whereas the idler and the loafer go

to be lined at all, whereas the idler and the loafer go scot-free. In addition to this, I famey that on mobilization considerable hardship would entail on the man who was mobilized, and the man who did not belong to any force would get the benefit of the trade or

business that the other man lost. This seems very business that the other man lost. This seems very hard, and I entirely agree with the Lecturer.

It is not my intention to detain you any longer. I think we have listened to an interesting debate on the Paper by Mr. Dawson. I have been requested to

state that Mr. Dawson, although he has lived a great many years in the Colonies, is a pure-bred Englishnd that what he has told us of the Colonies has only been learnt by his sojourn there.

I should like very much to propose a vote of thanks to Mr. Dawson before we separate for his very able Paper. (Loud applause.)

The following extract from a letter addressed by the Hon. Secretary to Mr. Dawson on the day following this discussion is appended as a footnote

"What I said was that between 60 and 70 per cent.
of the total male population of this country had at
some period of their lives done something in the way of military training, and that this was a greater per-

of military training, and that this was a greater percentage, than that shown by many nations which had a compulsory system—e. g., Germany 53 per cent., etc.

You will find certain figures which go to prove this statement set out in the two Papers which I enclose—Colonel Maude's Prize Essay, pp. 39-41 (and tables), and the pamphlet entitled "Our Birthright," by "Optimist." pp. 50-52.

timist," pp. 50-52.
Colonel Maude, as you will see, takes account only Colonel Maude, as you will see, takes account only of those who have done actual military service in army, navy, or auxiliary forces; "Optimist" adds boys' brigades, rifle clubs, etc. I think it fair to add police and Irish Constabulary, who are essentially trained men under discipline; but I allow only small numbers for this in view of the fact that a certain number of police are old soldiers who have been and are counted as such in the tables relating to the army.

I have made every careful inquiry into these

I have made every careful inquiry into these figures, and believe them to be substantially accurate. Let me now give my own summary of them with certain minor corrections of my own which I believe to be accurate.

There are 10,000,000 males in this country over 17 years of age. From these we must deduct 35 per cent. for those who are physically unfit or over 65 years of age. There remain 6,500,000 able-bodjed men in this country over 17 and under 65.

Colonel Maude's calculations show that there

	in	this country:	nere are
)	1.	Belonging to the Regular Army or on the	Δ
•		treserve—that is highly trained troop	-
	2.	under arms. Passed out of the Reserve of the Army	400,000
Lin	4.0	and under 55	100
	3.	In or passed out of the Navy and under 55	457,000
	4.	assed the Militia and Yeomanny	
		(a) Over 45 and under 65 (b) Over 30 and under 45	225,000
	5.	assed through the Volunteers	[18] 시간 시설시를 (1977)
		(a) Over 45 and under 65 (b) Over 30 and under 45	360,000
187	6.	Now serving in the Militia and Yeomanry	810,000
S.A.	7.	Now serving in the Volunteers	
		m the volunteers	260,000
		Now 60 per cent of the	3,712,000

Now 60 per cent. of the total able-bodied male population over 17 and under 65—viz. 6,500,000—is 3,-900,000. Add to 3,712,000 those who have served in the police or have been either in rifle clubs or boys' burgedes and will be a served to the company of the com brigades and you will get well over 3,900,000, or 60 The figures are even more convincing if we take

The figures are even more convincing it we take Colonel Maude's figures for the average annual quotas of recruits during the ten years 1890-1900.

The average "annual contingent" of youths who reached military age (over 17) during the decade 1890-1900 was 380,000. Deduct 25 per cent, for the physically unfit (this is, if anything, an underestimate). This gives the annual contingent of ablemants.

This gives the annual contingent of ablebodied males as 285,000. In each year of the decade 1890-1900 the number of

duits accepted was as follows.	no number
Regular Army	45,000
	10 000
Militla Volunteers	30,000 .
Police	55,000
Total	7,000 150,000

Prue, 60 per cent. of 285,000 is 171,000, But in the st place 25 per cent, is a very low estimate indeed r the physically unfit; and, in the second, I have ken no account either of rifle clubs or boys' bri-

In sadition, it must be remembered that there are In radition, it must be remembered that there are many departmental corps and accessories to an army in the field which require no special military training at all—e.g., drivers for the Army Service Corps, railway and other engineers, telegraphists, etc.

It therefore seems that we are well within the mark in saying that out of an available male population of 6 1-2 millions nearly four millions, or over 60 per cent, have done some military training, or are otherwise fitted to take their place in the line of battle, and that this percentage is higher than that

tle, and that this percentage is higher than that reached with a compulsory system by Germany her-

You say in your letter that if my statement were only approximately accurate it would appear that such associations as ours were wholly superfluous. But

you will observe, in the first place, that I never asserted that anything like all these men in this large total had received sufficient training: I only urged that they had that they had received some sort of training, and that it was unfair to blame the country for want of spirit. The spirit is willing enough, only the flesh is weak. The spirit is willing enough, only the flesh is weak. What is more, it must be admitted that among those 40 per cent. Who do nothing are very many who are far more fitted both by physique and education to serve their country in arms than a good proportion of those 60 per cent. Who have actually done so.

Above all, this vast total is for the most part quite without organization; there is no National Army yet, in the proper sense of the term, behind the regular

in the proper sense of the term, behind the regular army; no Landwehr or Landsturm behind this. There is no divisional organization, no artillery, no transport, no organized reserve of men, even no rifles for the greater part of them: in short, none of those things which most distinguish an army from a mob.

The National Defence Association exists in order that years need reserved.

The National Defence Association exists in order to try and persuade the country of the necessity for these two things—real organization and better training. But it does not as an association despair of the patriotism of the country or of the willingness of the majority of citizens to do their duty in defence.

Above all, its leading members feel most strongly that even the results obtained in the past—and you

that even the results obtained in the past-and you will admit that these are remarkable on my showing—would never have been obtained had the British people always believed in the theories of the "Blue Water

ple always believed in the theories of the "Blue Water School," or had they doubted, as you seem to doubt, of the utility of the sacrifices they were prepared to make in their country's cause.

It is the object of the Association to perpetuate and strengthen the individual citizen's distrust of those who say that we may sleep quietly in our beds either because the navy is a sufficient protection or because no services given volunterily have any milicause no services given voluntarily have any mili-

Replying to Mr. R. A. Johnson, Mr. A. J. Dawson quently communicated the following

With a courtesy which, when it is introduced into the realm of controversy, may be called chivalrous, the Honorary Secretary of the Association, Mr. R. A. Johnson, has permitted me to see his note of reply to my comment upon remarks made by him on the evening of November 18, and invited me to make any further comment thereon that I may wish to make. By way of demonstrating my appreciation of this cour-With a courtesy which, when it is introduced into ther comment thereon that I may wish to make. By way of demonstrating my appreciation of this courtesy, rather than because I see the need of further comment, I am glad to avail myself of this opportunity. The point in question is not the main issue, but if its further discussion can help to shake the sort of faith which I believe induces many members of the association to regard the voluntary system as fair and adequate, it is very well worth while from my point of view, while from the Association's point of view I am assurred that ventilation of any aspect of the am assurred that ventilation of any aspect of the great question of National Defence is desired.

The fairness of the Honorary Secretary's intent is

so clear to me that the manifest and glaring unfairness of his statement leaves me rather at a loss. With ness of his statement leaves me rather at a loss. With regard to Germany, the percentage he refers to is of perfectly trained and equipped soldiers ready to take the field in war; soldiers on a war footing. With regard to our own country the percentage he refers to includes our soldiers on war footing, i. a. the one just, equable comparison who I take to be something under six per cent. of males of a military age in our populace; and all our volunteers and militia, and all our navy, and all que boys' brigades and all those who lace; and all our volunteers and militia, and all our navy, and all our boys' brigades, and all those who ever have undergone training, and an enormous number of people who quite certainly have never had a rifle in their hands, and, in two words, between 60 and 70 per cent. of our male populace, as he says. (And all these are included—boys as well—in the Honorary Secretary's estimate of those "fitted to take their place in the line of battle!" My only comment is that the comparison simply has no meaning for me, no bearing whatever. Judged in such a remarkable manner, not 53 but 100 per cent. of the male populace of Germany is the figure to quote. I would add that I am informed that some ten thousand men annually enlist from the militia into the line, and that a large number of Army Reserve men enter the militia, and number of Army Reserve men enter the militia, and that both these sections are counted twice over. The Royal United Service Journal in February

The Royal United Service Journal in February 1900, published a table which seems to me finally to dispose of the Honorary Secretary's arguments and figures. This table includes all volunteers with regard to Great Britain; while, with regard to other countries, it includes only men who actually have served, or are serving, their time in the army. It will be seen that this table places Great Britain's army on war footing at a very generals figure, which most authorifooting at a very generous figure, which most authorities call much too high for truth.

Country. Population. Army on P.C. of sol-War Foot. diers to Adult Great Britain .. 38,104,975 500,000 Austria-Hun. ..41,358,000 Germany . ..52,279,000

about the question at all.

IN LIGHTER VEIN

A Hot Potato

At an alumni dinner lately a professor in a Massachusetts college told a laughable story of his boyhood. His father was president of a college, and the Commencement dinner was always held at his house. It was a grand affair, with many distinguished guests, and the little boy had to wait until they had finished dinner and returned to the parlor before he was allowed any chance at the good things of the table.

"For days previous to the event there was baking and brewing and the whole house was filled with savory odors. On the morning of the Commencement dinner there seemed no place in the house for a small urchin like myself. I was sent from the pantry, from the kitchen and from the dining room. So I wandered about disconsolately, growing hungry with every whiff of the roasting meats and the spicy pies and puddings.

"At length dinner was ready, and Jane, one of the red girls, went to the parlor to announce the fact, aving the dining room door ajar. I was in hiding nder the hall table, and here was my opportunity. I shed into the dining room to see what there was ood on the table. Alas, the only thing within my each was a dish of hot baked potatoes!

Father and the company were approaching. I zed a potato, henced it into my trouser pocket and ade a rise for the door. I managed to scramble past ther, who led the way with a lady on his arm, and undered full into the governor of the State.

"The governor laughed and picked me up in his ms, while I struggled for freedom."

Ah, what a fine boy, Mr. President!" said His llency, as he held me firmly against his side. he's a rogue, I see, for he has stolen his father's

I didn't steal father's chin, either,' I gasped, only a potato. And, O, it's burning me!' ith that I gave a ringing scream and, to the horfather and mother, struck the governor in the the my hand then it all came out. That hot potato had burst the governor's hus, and steaming through the nen trousers, had made a great red buan on my And so it came to pass that, until I entered the property of the proper

that is to help you remember to keep your is clear of stolen goods, father used to say, 'for ever knows when he may meet the governor."—

r A. Conan Doyle, at the Authors' Club Christ-dinner, related that in America some regions keeping the festival of Christmas, and they were to hang up their stockings at night. The poor negro had no stockings, and so he hung is pants. In the morning he was asked what he sat in his pants. He replied: suces I got a nigger; for my pants have gone."

story was told at a club the other day rishman was hard at work painting the top lishman was hard at work painting the top siczaph pole a bright green, when suddenly the paint slipped and splashed on the sidewalk one than a few seconds later another Irishman, a employee of the telephone company, came

the looked at the paint, then at his countryman on anxiety he coming down the pole. Then, with affected ahy, Mulcahy! Have ye had a hemorrhage?"

WIRELESS TELEGRAPHY

An excellent summary of the present position of wireless telegraphy, commercially and scientifically, was given in a paper read before the Institution of Engineers and Shipbuilders in Scotland, by Dr. J. Erskine-Murray.

In order to indicate the magnitude of the wireless telegraph system of communications throughout the world the author collected the following data from various government and other reports on the subject:

Total number of wireless telegraph stations, 1550, which may be classified as follows:

Commercial land stations 195

ious companies in approximately the following pro-Telefunken 41 per cent. Marconi ... 20 per cent.

De Forest ... 6 per cent.

Lodge-Muirhead ... 3 per cent.

In order to give an idea of the scientific position the author summed up the general principles of wireless telegraphy as follows:

1. The energy which transmits the signal is propagated over the carth's surface as an electric wave

motion.

2. This wave motion, or alternate current, may be either uniform like an ordinary lighting or power current, or it may be in the form of damped wave trains, i. c., in short series of waves following one another at comparatively long intervals; each series or train commencing strongly and dying out after comparatively few waves. In the first case, a high frequency alternate current generator or a vibrating electric are may be used; in the latter, the intermittant spark discharge of a condenser.

3. In both cases it is necessary that the frequency

cat spark discharge of a condenser.

3. In both cases it is necessary that the frequency of the current (number of alternations per second) should be high in order that the amount of electricity set in motion at each wave and, therefore, the actual dimensions of the apparatus, may not be too large. This will be appreciated when it is recollected that a small quantity of electricity, or any material when moving very rapidly, may transmit a large amount of energy. (A high speed De Laval steam turbine is a good mechanical instance of this.) A high frequency is thus advantageous from an engineering point of view, though it is not absolutely necessary.

4. The receiving apparatus must, therefore, be capable of detecting and indicating currents whose frequencies are greater than 100,000 per second. There are now scores, possibly hundreds, of ways in which this may be done. These may be classed as follows:

(a) Imperfect electrical contacts, or coherers,

whose resistance is changed by the action of the re-

whose resistance is changed by the control control current;

(b) Electrolytic detectors, which indicate the received currents by an alteration in polarisation;

(c) Thermometric detectors, which indicate the current through the effects of the change of temperature it causes: ature it causes:
ature it causes:
(d) Magnetic detectors, in which the magnetic state of a piece of magnetized iron is altered by the

(e) Electromagnetic detectors on the current bal-ance, or electro-dynamometer principle; (f) Valves or rectifiers which, owing to their property of permitting current to pass more easily in one direction than in the other, produce a more or less unidirectional and, therefore, measurable current directly from the alternating current received;

(g) A miscellaneous class whose methods of action have not yet been explained.

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The best-known forms of coherer are (1) the Marconi, consisting of a glass tube of about 5 millimetres bore, in which are two silver plugs about 5 millimetres apart, between which a small quantity of very fine nickel filings are placed. The gap is usually V-shaped, to admit of regulation by merely turning the tube, as the filings only occupy about one-third of the space, and are, therefore, more or less crowded together, according as the wide or narrow end of the V is uppermost. (2) The Lodge-Muirhead, which consists of a razor-edged steel wheel about the diameter of a threepenny bit, whose edge dips into mercury covered with oil, and which is kept revolving by clockwork. The Marconi coherer, which, by the way, is a modified form of Brandy tube and is also used by the Telefunken company, requires to be decohered by tapping or shaking it after it has recorded a signal, as it would otherwise remain cohered. This, though apparently a disadvantage, is in reality the essence of its success, for it is owing to this that it was first possible to maintain the effect of the passage of the high frequency current long enough to obtain from it a permanent record on the Morse tape by means of ordinary telegraph instruments. The Lodge-Muirhead coherer is decohered after a small fraction of a second by the movement of the wheel. The other detectors most in use are Marconi's magnetic detector and the electrolytic barretter invented by Fessenden.

The electrolytic receiver, or barretter, depends on the fact that if a constant voltage be applied between electrodes dipping into an electrolyte, one of which is of very small area, the current is, under certain conditions, unstable, and the sudden superposition of a high frequency current causes a sudden and considerable increase in the constant current. The action is not yet properly understood, though many theories have been stated. A telephone is generally used in connection with this detector, which is one of the most sensitive of all.

It is noticeable that in the above list of detectors of high frequency currents there are very few. if any.

which give directly an audible or visible indication of the signal. In practically every case it is thus necessary to have some auxiliary instrument to indicate to the operator that the detector has reacted. In some cases a telephone, syphon recorded, or Morse inker, may be used at will; in others the telephone is the only auxiliary suitable, and it is, therefore, not possible to obtain a permanent record of a message.

5. The waves are propagated outward from the transmitting station, either equally in all directions, or with a maximum in one direction, according as the aerial wire is vertical or inclined. In the latter case the strongest transmission is in the direction of the lower end of the wire. This method is used at Clifden and Glace Bay, Marconi's Aransatlantic stations, and at Knockree, the Poulsen Transatlantic station now building.

building.

It is now easy to determine with considerable accuracy, in fact, within a few degrees, the direction from which a message is coming—a discovery which may in the near future become a great aid to navigation, since any two land stations within range of a ship will be able, by making simultaneous observations, to give their bearings, and thus to fix the actual position of the vessel.

7. The speed of transmission at moderate distances, and the reliability of a wireless connection, are now both as good as the same qualities in an ordinary land wire. A proof is given by the abolition of the Post Office wire from Hunstanton to Skegness, since wireless stations have been erected, and the fact that a speed of 90 words per minute has been attained between these stations.

8. The means of preventing interference between

8. The means of preventing interference between neighboring stations have been developed to such good effect in the last few years that it is now possible, as experience shows, to construct apparatus which will respond only to waves which do not differ by more than about 4 per cent. From the proper wave length for the station. An even greater sharpness in tuning has, indeed, been claimed by various workers, and may very probably have been obtained. A margin of 4 per cent. is, however, sufficient to render possible the efficient working of a very large number of stations in a comparatively small area without interference.

Mr. James Regan, manager of the Dominion Press
Clipping Agency, in Toronto, tells the following
story illustrating the kind of errors that such an
agency as his must guard against. Prof. Edmund
Burke, of New York, received a letter from a pressclipping agency. The letter informed the professor
that his patronage was desired, and that as a sample
of the work he would find enclosed a clipping from a
speech by President Roosevelt, in which he had quoted the professor's words.

Professor Burke read the clipping nearly through
before he realized that the president was quoting
from Edmund Burke's speech on "Conciliation with
the American Colonies," delivered about 100 years before Prof. Burke was born.

A Song of January 'Twas Joy that laid the passing year,
'Tis Joy that speeds the new;
Hath been and is in you.
All joy that I have known, my dear,
All peace and hope of peace, my dear,
Forever lives in you.

Like Janus, who with faces twain
Kept watch in ancient Rome,
My love shall front old days again.
And days that are to come.

So, in this month of Janus, here Where merge the old and new, How'er my joy may turn, my dear, It must envisage you.

Its past may count but twenty suns, Its future reacheth far; Beyond the edge of time it runs, Beyond the utmost star.

'Twas Joy that laid the passing year,
'Tis Joy that speeds the new;
All joy that I have known, my dear,
Hath been and is in you,
All peace and hope of peace, my dear,
Forever lives in you.
—Catholic Standard and Times—

Out of the Past Some of the old customs kept up in our schools by way of tradition seem very curious to the student of

Within the last quarter of a century many of these practices have been abolished in the conviction that, however valuable historical tradition may be, much of it is useless lumber, hindering progress. A small Etonian got into trouble one day by demanding a fulfilment of the letter of one of the old customs. According to a statute of Henry VI. on one day of the year every colleger was entitled to receive threepence or half a sheep, three pennies being the value of half a sheep at the time the law was passed. On the appointed day the bursar would appear in the hall and give each boy his threepence.

One day, not many years ago, a small and impudent pupil demanded the half sheep instead of the money. The bursar flew into a terrible rage, reported the matter to the doctor, and succeeded in obtaining for the boy a sound flogging.

The young scamp, however, received a compensation for his smarts. The next day after his corporal punishment he met his tutor, who happened to be a sympathetic man with a keen sense of humor.

"Master Bramwell," he said, "I hear you are a great criminal. You have asked for a half sheep and got a flogging. Come to breakfast with me on Sunday. Now, boy, what would you like to eat?"

"Please, sir, goose!" stammered the delighted lad, and he had goose.—Christian Age. Within the last quarter of a century many of these

The late Congressman Jerry Simpson was considered a good deal of a wit at Washington in his day. Nothing aroused his wrath and disdain more than bragging about affluence and luxurious living. One day a rich senator holding forth in that strain remarked unnecessarily:

"I was obliged to discharge my second coachman last week. Though he was in many ways an invaluable fellow, he was continually hanging around one of the prettier under housemaids."

"Ah." said Mr. Simpson gravely, "I can sympathize with you. I have just been obliged to discharge my third groom. He was always loafing in the servants' billiard room."