

A PERSONAL ACCOUNT OF MINOR ACTIVITIES IN THE
BRITISH AGRICULTURAL WAR EFFORT WITH SOME
SPECULATIONS ON THE APPLICATION OF BRITISH
TECHNIQUE IN IRISH AGRICULTURAL CONDITIONS.

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(*Read on Friday, 12th April, 1946.*)

It was my fortunate lot to see something, at first hand, of the tremendous drive for increased food production, made almost as a single individual, by the whole of that great mass of men and women in the agricultural industry of Great Britain. In order to make clear the minor part played by myself in this spectacular movement I must be forgiven a short personal interpolation. At the outbreak of war I was made Agricultural Manager for the South Eastern Division of Imperial Chemical Industries, Limited. The area allotted to me consisted of the 22 counties and 23 War Executive Committee areas, south of a line drawn from Boston to Bournemouth. In normal times the work consisted merely in the control of technical, clerical and administrative staff and the maintenance of close personal relationships with the Company's agents and the multiplicity of agricultural merchants doing with us a normal commercial trade. (It is important to note here that in 1939, in the South Eastern Division, I.C.I. had some 140 agents—big, established agricultural firms—and, in addition, traded with over 400 other agricultural merchants.)

In September, 1939, there was a trading pause of about a week during which everybody thought that everything was going to be different. Thereafter it was seen clearly that, as far as possible and within the limitation imposed by necessary controls, normal trading—especially in vital products such as fertilisers—was the most desirable course.

Soon after this first phase of the war the Chairman of I.C.I. Ltd., Lord McGowan, entered into correspondence with the British Minister of Agriculture, Mr. R. S. Hudson, who came into Office when his predecessor Mr. Dorman Smith went out to Burma. Lord McGowan offered to the Minister, for any technical purpose under Mr. Hudson's control, the whole of his technical agricultural staff. After the necessary limitations and definitions had been made this offer was accepted and, towards the end of May, 1940, I found myself made responsible for the running of the National Silage Campaign in the 22 counties of my satrapy.

We were given this task to do because it was known that silage was an unpopular subject with farmers; and the county officials at that time were working unbelievably long hours at the main plank of the agricultural programme, which was an increase in the tillage area. It was thought that we, in I.C.I., might perhaps know a little more than the next man about the propaganda and publicity approach to a National Campaign on an unpopular subject; and I think that this line of reasoning was correct.

Many readers of this paper will be familiar with the endless stream

of literature which has come off the presses about one or other of the many types of silage which can be made; but the food situation—with the fall of France imminent, the Battle of Britain beginning and the Battle of the Atlantic known to be in contemplation—was so bad that we had to make up our minds quickly. We decided on grass silage, made in small containers holding about 30 tons each, with molasses as the chief carrier for the lactic bacteria. We had several conferences before deciding this. We were not blind to the fact that good silage made in a pit by knowledgeable persons has no superior, and we had the best of reasons, first hand experience both of the inventor and his process, for considering fully the Acid silage technique of Professor A. I. Virtanen, of Finland. But we were in a great hurry; we could arrange with the Controller of Molasses and Industrial Alcohol for liberal supplies of molasses, but we could not arrange for weak acid; and we could not arrange for the necessary impedimenta of rubber boots, rubber cloaks, rubber gloves and rubber watering cans. These things, it will be remembered, were more than precious at that time.

After we had decided on the type of silage for which we would drive there still remained the nightmare of time shortage. We, ourselves, knew—or thought we knew—how to make good grass silage treated with molasses; and, because we were commercial men—I speak now for myself and my 50 or 60 technical colleagues on the agricultural side of our Company—we felt confident in our powers of demonstrating correct methods. But there were not enough of us.

There were at that time five Agricultural Managers in I.C.I.'s home territory. I must confine myself, therefore, to my own approach to the problem, and it is for this reason that I specified earlier the number of agricultural agents and merchants with whom I did business. I decided to send a personal letter to the principal of each of these businesses and to call for one or more aged, reserved, or other available member of the staff to volunteer for an intensive course in silage manufacture and thereafter, if found suitable, to enroll himself as a voluntary silage demonstrator.

It was then necessary to find training centres. We used our own research station. We used, through the kindness of the two principals, the Farm Institute at Sparsholt, in Hampshire, and the Farm Institute at Oaklands, in Hertfordshire.

Our letter received a magnificent response and, in a fortnight we had trained, sufficiently for the bare needs of the emergency, 270 demonstrators. I then wrote personally to each of these men with the following proposition: that they should, in their own district, make themselves responsible for holding two silage demonstrations—not to a large body of farmers, but to about 10, 12 or 15 farmers—so that time and individual attention could be given to all those attending. The idea was that the audience would go straight home and go on with the job itself. We discovered, as better men have discovered in the past, that most promises fell short of performance; but we got under way in the South Eastern Division in the last week of May, and we had held over 50 demonstrations by the end of June. (It is of interest to record that three of these demonstrations were bombed by the enemy.)

We discovered, as we had expected, a marked reluctance on the part of farmers to attend these demonstrations, and I took on 14

agricultural students from Wye College, in Kent, who ran about on bicycles, and, in the scriptural phrase, "Compelled them to come in." It was a great deal of fun and a good deal of work; moreover, we failed.

Readers with long memories will recall that, in England at any rate, there was no rain in July or August of 1940, and the grass shrivelled and withered and ceased to grow; but, in spite of that, we did cause to be made one million tons of silage between May and December—a mere flea bite on the need, but a good start.

Some points of interest emerge from this campaign which are perhaps worth setting out here: Not one of our voluntary workers, although offered their expenses, accepted them, or, indeed applied for them. A new industry was created overnight—that of silage container manufacture. When the campaign started there was on the market an admirable wire and paper container, of which we made full use. There were two most excellent timber containers and there were about four or five concrete precasters who included silos on their range. By Christmas there were 70 firms in the business in the South Eastern Division alone, making silos from every conceivable type of material, including plastic. But the latter was only a prototype. We had silos made of iron, timber, coke breeze, laminated plywood and asbestos. We used anything into which grass could be put and stamped down.

Towards autumn, and to save something from the wreck, we launched in East Anglia a sugar beet top silage campaign. Naturally, no attempt was made here to use containers—the ordinary clamp method being entirely suitable. We had the usual two difficulties to overcome—the fear of oxalic acid poisoning (so rare in my opinion as to be negligible) and the dirty nature of the job. This campaign, which was also a failure, is mentioned merely to point out that, with voluntary squads and our own technical staff, we conducted a sugar beet top silage demonstration in every 10 square miles of territory throughout East and West Suffolk and Norfolk. It might be of interest to record that the men running this campaign lived on their own in a private settlement for a month in order to stay by the job.

The following year a further small task was laid upon us. The Ministry of Agriculture, after much examination, decided, as an emergency measure and as a nucleus against the impact of dire necessity, to establish throughout England and Wales about 5,000 straw pulp plants. We had to attempt to popularise this most useful, and, to farmers, rather frightening project, side by side with maintaining at full blast the silage campaign. Here it is perhaps relevant to observe that the main argument behind these campaigns and, of course, those much larger and much more important campaigns being conducted by the permanent officials, was that the life line of Britain would be cut and that nothing would come into the country—everything having to be provided by the efforts of the people. It is important to note here that this never happened. Our continual cry of "Wolf" met with the truthful retort from the farmer: "We are doing very nicely, thank you." But we did not know that yet, and we started on the Straw Pulp Campaign with considerable optimism.

Speaking personally, it was, I thought, a complete heartbreak. I

took on as demonstrators and salesmen of plants—these were sold at net cost (or rather by means of a curiously worked subsidised-on-recommendation plan) by arrangement with the precasters through the Ministry of Agriculture—23 men engaged in the cattle-food industry. Only 12 of these stayed the course; only three were good enough to hold their spirit in an atmosphere of denigration, of scepticism and of non-co-operation. But *they* were good.

All readers of this paper will be familiar with the bare necessities for operating a straw pulp process. A concrete double tank, with drainer, is necessary, and the use of caustic solution, with plenty of washing water. To the average farmer it seemed like setting up a chemical laboratory on his holding, although it is interesting to observe that many straw pulp plants are in operation still. We held the most fantastic demonstrations in order to attract attention to this process and to popularise it. I myself conceived a demonstration to end demonstrations. It was attended by the Minister in person. It cost £490 to stage, the straw pulp plant itself being surrounded with bank seats and floodlit with Neon lights! Anything, everything, bearing on the process was included. The day before all was in perfect order. On the day itself nothing went right.

I staged another big demonstration at Royden, in Norfolk. Hundreds of farmers came; were interested in the process; asked all the questions; watched the material being fed to cattle, and went away to do nothing.

My colleague in the North of England arranged the finest demonstration around straw pulp which I have ever seen. At the end of it he was certain that, from the gigantic audience he had attracted, and which had held speakers literally for hours with their questions, some hundreds would go home to put the process into operation; in fact, from that demonstration only six plants could ever be traced.

By this time the agricultural war effort was becoming amalgamated and consolidated and in this process the silage and straw pulp campaigns were passed to the official county authorities—where they eventually died. No one had either the knowledge or, more important, the time amongst official staffs for these subsidiary lines, and the farmer himself was now getting, not all he needed, but enough supplementaries to sustain his increased production. Our services from I.C.I., in silage and straw pulp, were, therefore, more or less redundant. The Ministry was loath to return us to our normal work, which, with the tremendous increase in fertiliser production and the far greater evenness of distribution—due to the rationing system of phosphate and potash—was becoming exceedingly arduous on its own account. Our silage and straw pulp demonstrations had commended themselves to the authorities and, here the commercial angle is important, so had our ability to create a succession of news stories out of constant repetitions and thus maintain the interest of the agricultural and general press. In this connection it might be of interest to observe that a leading East Anglian farmer said to me about this time that he had given up taking both agricultural papers since they now contained nothing but silage and straw pulp!

The Ministry, in its wisdom, decided that we should put such abilities and technical knowledge as we possessed to the task of popularising, by demonstration, by publicity, by any legitimate or illegitimate method which occurred to us, all the types of farming

and farming techniques which the war drive made necessary, and all those services which the County Committees provided either free or on contract to the farmers within their area. In every War Executive Committee throughout the country, except one, a Technical Demonstration Committee was set up, and I served, either direct or by delegate, on all 23 within my Division.

That was a fruitful year. I stumped my area with the Minister's Eastern England inspector and a joint document which we christened "The Forty-nine Articles". This laid down what we thought should be done to attract farmers' attentions. Our first scheme—our first seed—fell on soil so fruitful that it nearly wrecked, with its luxuriant growth, the entire plan.

We ventured to suggest to the Surrey War Agricultural Committee that they should hold a demonstration showing in practice every conceivable thing which they did, or could do, for the Surrey farmer. The result of this was a two-day demonstration which attracted farmers from every county in England at a moment when the slogan "Is your journey really necessary?" was just being popularised. There were 2,000 farmers present on the evening of the first day when the Minister addressed the crowd, and there were 4,000 to hear Sir George Stapledon the following day!

We soft-pedalled a bit after that but we made a number of interesting discoveries; for example: we found that Messrs. Lister, the plough manufacturers in Gloucester, had on their staff a gentleman who, to my mind, knows more about the setting of the plough than anybody now living—a very broad statement. But, better than this, Mr. Rea could demonstrate the setting of a three-furrow tractor plough in the most fascinating, entertaining and simple manner. A stage was reached at which farmers would go miles just to listen to him first talking about setting the plough and then to watch him doing the most beautiful work with three furrows behind a Fordson. It is not a misstatement to say that this man alone ought to get, even if he never does get, much of the credit for the tillage increase. Prior to his series of lectures all over the country it was firmly held that a Fordson could not work all day with more than two furrows.

We made other efforts: the East Suffolk Committee staged an Exhibition, which arose from a chance remark by Mr. Anderson, the Minister's inspector, called "A Farmer's Chamber of Horrors." This contained nothing but damaged and ill-used machinery, and the exhibit attracted nation-wide attention. There was a noticeable improvement, throughout England and Wales, in the care of machinery as a result of this one show.

In Essex, the County Executive Officer, Mr. Leslie, announced that he had gone out of the technical business for the duration of the war and had become a showman. He split his county into 13 districts and something slightly spectacular happened in each of those districts every week.

What was the result of all this: I have only touched on my own small part. But all the time every War Committee was dividing itself into Area Committees and every Area Committee was splitting into Parish Committees. Farmers were being classified by large numbers of fieldsmen, day after day, month after month throughout the first part of the war, as "A", "B" or "C" men. The "A" men were left alone. The "B" men received a few orders but were then

left alone, and the "C" men began to have their moribund and decrepit farms run for them—on the technical side by the County Committees, and on the practical side by their "A" and "B" neighbours. This, to my mind, was the most inspiring manifestation of the whole war.

It will be recalled by readers of this paper that, throughout the duration of the war, no farm labourer struck work and no farmer, not one, flinched from the tasks laid upon him. I know personally scores and scores of cases where men who were farmers by inheritance, by habit, or by inclination, but who were bad farmers, had their land ploughed for them, often at night, by able neighbours; the seed sown and the harvest reaped. And there were no jealousies, or very few, because there was a common urge and a common lot. The result is now history—Great Britain at this moment is the most completely mechanised agricultural country in the world. The great plains in the United States; the prairies in Canada, and the wheat lands of Australia have nothing to show, in machines per acre, to compare with it.

Even to members of this Society statistics must sometimes present a dull, soulless aspect, and I would, therefore, like to give a personal example of what the agricultural drive meant in England. It was my habit before the war, and during it, to spend much time rambling in the Chiltern Hills. All round lie the Counties of Oxfordshire and Buckinghamshire; the latter one of the poorest farming districts in England; the former, before the war, consisting almost entirely of second-rate under-managed grass. From the summit of, say, Chinnor Hill, five counties are visible. Before the war all poor, all under grass.

A mile or two from Chinnor, from Bledlow Ridge, on a clear day eleven counties may be seen, and, before the war, they, too, had the same rolling pasture and neglected-grass appearance. At the beginning of harvest, 1944, I climbed Bledlow Ridge for the last time before leaving England for this country. It was a cloudless day in mid-August, and, as far as the eye could see, the countryside was one sheet of gold! I never hope to see a lovelier sight.

That is what the war effort meant to England, and that was done by a few hundred patient men who engaged themselves in persuasion rather than coercion and who were working in a soil which in those years would have borne any harvest which the mind of man could conceive. There was nothing which the British farmer would not do at that time.

I was one day standing in a public house in Kings Lynn, where two of the acknowledged best farmers in England were present. As a joke it was arranged that reference should be made, in the presence of one of these men, to a large thistle which was spoiling the appearance of a 20-acre field of wheat. It was realised that one thistle would be enough. The man concerned instantly left the bar and motored ten miles to pull it up! That is an exaggerated but a colourful and true instance of what high farming began to mean in England towards the end of the war.

I had the privilege of standing for an hour in 70 acres of King Edward potatoes on Wissington Marsh in the late summer of 1944. The owner offered me half a crown per dozen weeds—he knew that it was a safe bet; and I sat up with that man until five o'clock the

following morning telling him about the productivity of Ireland, and he would not believe it. He said: "If they can get 10 tons of ware potatoes to the acre, why don't they dominate the potato market, as we do here where we are well content with seven tons." "If they can grow grass," he said, "as I cannot, why don't they use their surplus grass for winter feeding and cut into the New Zealand butter market during the winter months?" We talked about sugar beet and when I told him that growers over here were given refined sugar as a consideration to make them grow the crop, he was frankly appalled. He grew 120 acres of sugar beet but he had to be content with his sugar ration! But the fact which surprised him most was the supreme excellence of the Irish labourers who came over year by year from the West of Ireland and, beginning with his late-hay harvest, stayed with him until the last of the sugar beet. "Is there nothing," he said, "for these most highly skilled men, the like of which we do not possess here, to do at home?" I have never been sure of the answer to that.

I find that here in Ireland a man growing 10 acres of sugar beet regards himself as some kind of tillage genius—and three friends of mine between them grow over 2,000 acres of this crop in Norfolk each year. Unless I have been reading the wrong books, or books containing misleading information, Ireland was a great wheat-growing country 100 years ago, and it seems to me that 700,000 acres from the wonderful soil of Ireland is not enough. And I am quite certain that exhortation, newspaper advertising and a general tillage order are not enough.

Readers will be aware that the Irish Department of Agriculture has always been regarded, outside Ireland, as the flower and pattern of what an official organisation should be. I subscribe to that belief, but the Department does not seem to get the encouragement its efforts deserve, and it does not seem to me to have sufficient staff. You cannot make a drive for anything other than an appeal to the spirit, if you are working on your own. You need a few apostles and a huge number of disciples. I have seen apostles over here; but where are the disciples? Those I have met are keen young men, and their every action appears to be debated in public, on a strict financial basis, by county councils. To my mind this is the reverse of democracy—this is lobbying and vote-snatching at its worst. Who cares whether Mr. O'Blánk spent 4s. 6d. of the council's money visiting eight farmers? The pity of it is that he is not empowered to spend £5 and thus do the job properly.

But this kind of invective probably makes poor reading, and poor listening, for sober-minded statisticians. They will be looking from me for definite speculations drawn from the picture which I have painted at the beginning. Here they are:

In every community which rests, as does ours, on a population which is 50 per cent. directly engaged in agriculture it is a very safe bet that huge numbers of "C" farmers will be found. I do not wish to be misunderstood on this point. The value of the "C" farmer, who stays on a poor holding because he must, is to any State like ours incalculable; but such a man produces from his acres roughly nothing more than his own keep and a minute surplus.

The "C" farmer was the weakness in the British agricultural effort. I suspect he was, and is, the weakness in the Irish emergency

effort. He does not need control—he needs active assistance. It is almost useless to give this man lectures and it is difficult to get him to attend demonstrations. He has not the mental equipment to benefit from the one or, if he attends at all, to profit from the other. Some one must do part of his work for him.

Can this be done in Ireland? If it cannot, what is the reason? For Ireland produces some of the best farmers in the world, and, because of their climate and the productivity of their soil, they have, as I have seen for myself, much spare time to devote to the services of their country. That is my Speculation No. 1.

Speculation No. 2 concerns itself with the age-old problem, in Ireland, of winter dairying. As soon as the grass grows, the glut of butter begins. In a country where the rationing of butter is imposed, I heard over thirty times last summer the phrase: "Brush out your hair, Mollie, and go round to the grocer for some extra butter!" But, in winter there is not enough butter to go round.

Part of the British war effort was a winter calving campaign, which was diligently fostered by county livestock officers and veterinary surgeons who meant business and got results. Again, exhortation is not enough; reform here can only be done by personal argument in the cowshed—and that means *men*.

Summer butter production will never make the fortunes of Ireland or of Irish farmers. It necessitates (to iron out the annual cost) subsidies and a higher cost at home than abroad.

But winter calves and winter-calving cows need plenty of food, and the turnip won't give it to them. I offer as a personal opinion that this is the best grass silage country in the world—New Zealand not excepted—and why the making of silage is not to be seen on practically every farm in Ireland, and certainly on every small farm in Ireland, passes my comprehension. There must be a reason for this—what is it?

Labour was, I think, the chief reason which disheartened the British farmer; but the Irish farmer is essentially a family farmer, and his labour, therefore, costs little in real money.

Speculation No. 3: What has happened in Irish livestock circles? Part of the British war effort was to intensify the fight against disease. Is enough being done here outside the efforts of some few dozen devoted men?

Who among the farming community in every parish is making himself responsible for a higher standard of farming all around him? Is everybody lending their machinery to everybody else? I know well enough that in a wet harvest the inspiring sight can be seen in Ireland, as it can in every other agricultural country in the world, of neighbours going out in a body on a Sunday, or late in the evening, to get in a crop for somebody caught out by the weather; but that is not what I mean: Where is the man (not an official) advising first quality seed and knowing about it, and helping to get it? Where is the man who, if you like, is always interfering in somebody else's business? Is he unpopular here? Because he is the only person who can really increase production.

Some time ago I spoke in very general, light and unverified terms about Irish industry and Irish agriculture and I was accused of endeavouring to turn this country into an appanage of England.

Nothing could be further from my thoughts or intentions; but it is a tragic sight to motor across Ireland, as I did recently, and to reflect that this already over-large City of Dublin is supported by a country where it is possible to motor for miles without encountering one trace of agricultural activity, and where only the road-side hedges seem to be cut—and then in the interests of urban and cross-country traffic by the county authorities.

In Ireland, undoubtedly, there is the best grass in the world. Would any man, say, who reads this paper that it was being managed to 25 per cent. of its capacity? I have seen land in Donegal which could, and did, produce 35 tons of potatoes to the statute acre. Only half a dozen people seem to be growing potatoes in that area. Naturally they will concentrate on the production of seed; but surely the commercial possibilities of this could be fostered in some much larger way. I hasten to add that I have first-hand knowledge about the supreme excellence of the Irish seed potato industry. My point here is that the Scotsman is beginning to put his house in order and there is not too much time in which to cut him out.

Tillage orders here seem to be based on arithmetic, and it is suggested that this again is due to lack of man-power since a successful tillage order should be based on direct survey. I have seen in Cork land scheduled for corn growing which was under water from April to June. I also saw the crop ultimately harvested from 11 acres of such land: it could have been stacked on a dining-room table!

Nothing in these speculations is to be taken as derogatory, and, above all, I wish once and for all to vindicate myself from a charge too frequently brought against me of speaking from the profit motive or an alien view point.

It is our habit in Ireland to-day to lay emphasis on industry as such. This is an emphasis of which I personally greatly approve. I have little sympathy with those who buy "foreign" if there is a similar product of Irish manufacture.

But the effect of pouring money (in terms of skilled men and assistance) into the basic industry of the country would, in my opinion, do more to foster industry at home than any other measure.

I offer a few industries which, as I see them, can only be built in Ireland around a prosperous countryside:

Agricultural machinery; dairy equipment and machinery (for the farm); large-scale lime burning; large-scale fence wire making; rubber boots and tractor tyres; large-scale weed and pesticide manufacture; the means, as well as the determination, to improve national transport; the revival of the co-operative system as part of the general way of life (Plunkett's intention), with all that that means in the way of trade; the utilization, as opposed to the construction, of nation-wide amenity schemes, such as rural electrification and all the industry which springs from that.

What Mayo cottager's wife thinks to-day in terms of an electric washing-machine, constant hot water, and the party line? She could. Ten years of temporary leys would do it. Reflect on the possibilities of export and, for the moment, leave England out, except perhaps for direct surplus produce. Craft goods in ever increasing quantities for our people in the States; Irish made zapatas for Spain and South America, Irish cloth all over the world, and above and beyond all, a rise in purchasing power in the great bare plates of

our own country. We would only keep one home-produced article perpetually *at home*—Irish human flesh and blood.

It was truly said by Mrs. Parnell that "Ireland has broken the heart of every man who tried to help her," but there can be no resounding success for Ireland in the modern world (if we want it) and there can be no genuine success for Irish industry as a whole if the greatest industry in the country is not put on a firm profit-making basis, and it can only so be put by every man in Ireland making it his business to see that better farming is the beginning of all good things.

DISCUSSION ON MR. FITZGERALD'S PAPER.

Fr. Coyne, proposing the vote of thanks, said that any individual, and *a fortiori*, any society, owes a debt of gratitude or a vote of thanks, to anyone who can, in a disinterested and objective way examine his or its conscience for him or it: and Mr. Fitzgerald has certainly examined our national conscience with regard to agricultural efficiency. But he has done still more, having shown us where we are failing he has pointed out certain fruitful lines of amendment: and perhaps, greatest service of all, he has not left us in a despondent or defeatist hopeless mood, but has given us a rousing and inspiring call to action, instilling, as far as one can, courage and vigour to tackle a hard job to lift ourselves out of a rut. He has, indeed, had the temerity to hold up before us the example of a country that used to be a convenient traditional enemy, which acted as a scapegoat on which we were able to pile our own sins and defects: but we have grown up sufficiently to be able to smile, wryly perhaps, and to murmur to ourselves, *Fas est ab hoste discere*: and at any rate, anyone rejoicing in the Christian name of Kevin, and the surname of Fitzgerald may take liberties that other men may not.

Actually, I think that there is nothing new or unknown to us as regards the improvement of agricultural technique in Mr. Fitzgerald's paper—his note of hope and fresh courage is the newest and most welcome feature. All his suggestions have been the familiar topic of conversation, discussion, lectures and the rest for a long time now among those really interested in agriculture. Many have been put in practice, more perhaps than he knows, on a smaller or larger scale up and down the country. He said that he saw some few apostles over here: he looks at the land with fresh eyes—but I know something about this matter and I think that if he looks closer he will find that his Apostles are almost to man a tedious multiplication of one apostle—many St. Thomas,—for we have in all truth, several colleges of apostles all made up of doubting Thomas's. But we have something different from apostles and something that came and necessarily came before the apostles, a fore-runner, namely, we have indeed, a John the Baptist—that is, a "voice of one crying in the wilderness." In outward form and figure, he may hardly be recognisable as the ascetic haggard, emaciated traditional John: but he certainly has this much in common with him that his vigour of preaching is similar, and that he *IS* a voice crying in the wilderness—and possibly the way he handles his opponents has something of the St. John touch.

Our problem from a national or community angle is: if we want to have a prosperous and relatively fully-employed industrial branch to our national economy, if we want to have good and efficient transport, good social services (or else the absence of the need of them)—we must start and build upon a prosperous agriculture. And if we want a pros-

perous agriculture, we lack nothing, I venture to say we lack absolutely nothing, except technical efficiency.

Without a brisk demand or market for its goods, a market that will readily absorb more than more commodities and so permit of an expanding industrial production, we shall never have a prosperous industry. Foreign markets will not fill the bill: The main portion of that market must come from the cash income of the community in Ireland, and at least fifty per cent of that must come from the cash income of the farmers and their labourers or else those that depend upon the farmers, rural craftsmen and the like. Taking 1943 figures, at 1938 prices, the total purchasing power in the hands of the agricultural community to spend on industrial products is very much less than £40,000,000, it is probably not even half that, when allowance is made for the payment of professional services, rates and the rest of such charges.

If the Government want industry to employ more people, the first step must be to enable the farmers to produce more marketable wealth per man-hour, per acre, per beast, per rural family: in other words, industry ought to lay itself out to secure that its best customer on whom its prosperity depends, is also a wealthy customer with plenty of purchasing power. An inefficient agriculture is the heaviest millstone round the neck of any country's industrial branch.

I may be told, I am certain that before the evening is over I shall be told, that the farmers are prosperous: and three—may I say very silly and stupid—so-called proofs will be brought forward: they are hoary old legends that one would have thought might well be left to the nurseries with Grimm and Hans Andersen: the first is the Bank-deposit legend: the second is the priest-son, daughter-nun legend: and the third is the stocking in the chimney legend.

As to the bank-deposit legend—it began with the figure given in evidence to the Banking Commission of £23,000,000 net deposits of the farmers in Ireland. That was in 1936: probably to-day the figure would be given as £50,000,000. But there are 260,000 or 270,000 farmers in Ireland—and if only 50,000 of them had £1,000, not fabulous wealth, on deposit, that would account for the whole of the £50,000,000—leaving not a penny for the vast majority, most of whom of course have not even a bank account much less a deposit. Imagine just 2,000 farmers in each county with a £1,000 deposit—or 4,000 with a £500—and the bank deposit legend disappears.

As to the priest-son, daughter-nun legend: once more we have the figures and the legend melts away, despite the obituary notices of the local papers. We actually know how many priests and nuns are being educated by the farmers in any given year: and we know that there are not more than 5,000, if indeed there are that who have children going on for these vocations: and these 5,000 include those who have to support their children over a period of years—there are not a different 5,000 every year. The thing is such an absurd argument seeing that all the housing space of all the convents and seminaries in Ireland could only hold a very limited number of students. But out of 270,000 farmers, 5,000 are spending about £100 a year on educating their children for the Church, therefore the farmers are very prosperous. And what about the 265,000 farmers who are not spending this? The same type of argument is used for other professions: but it vanishes in the same way when one looks at the figures of the students actually being paid for in the Universities and other institutions and calculates how many of these are being paid for by the farmers out of their "profits."

The final argument is the "stocking in the chimney" one. But this is easily disposed of by having a look at the amount of hoarding of currency notes that can be going on. The circulation is in the region of £40,000,000: take the fantastic assumption that half of this is hidden away in the farmers' stockings—that is £20,000,000: and each farmer is prosperous because he has £74 stored away.

Of course, the facts are that the farmers are not prosperous: possibly there are 2,000 or 3,000 farmers in each county who for special reasons are prosperous—say a total of 70,000 really prosperous farmers. But what of the other 200,000? We know the outyut per labour unit and per acre—after all, Mr. Murphy's papers have been before us for some years now and never challenged on any substantial point. He could afford, for the sake of argument, but without admitting to allow his opponents to assume a 25 per cent. error and still the farmers would not be prosperous. One is forced to believe that these figures have not yet penetrated peoples heads. Take a 40 acre farm and there are tens of thousands of such, and there are on the rather large size for this country. It supports a family of four persons: it yields as a net remuneration for labour employed on it, £4 10 per acre. It requires two units of labour to make it yield even this: that is, £90 per year per unit of labour, and of that about £30 is in kind. And that is on the generous side.

Could that yield be stepped up? We believe it could: and by the very means, among others, put forward by Mr. Fitzgerald. But this is a technical question that I shall leave to speakers who I am sure will be only too anxious to develop it in the course of this discussion. If we can only get the small farmers to grow grass, to make silage, to keep only 700 gallon cows, to feed them winter and summer, to harness their pigs and potatoes to the plough, to get their women folk properly equipped with education and capital to run the ancillary industries—poultry, fruit and the like, then we are beginning to bring prosperity within sight. There is a threefold remedy: Education, Organisation, Capitalisation—and in that order. The Vocational Commission has a series of recommendations on these lines, involving County Boards and County Directors of Agriculture, with Parish Organisation to secure both a farmer and a wide-spread representation on the Boards: with County Colleges and educational services, veterinary, research and the like bureaux. But it would take too long to go into the details of all this. Only one thing ought to be burned in the mind of every man interested in the welfare of Ireland: the farmer, as to 4-5ths of his number, is NOT prosperous, because he lacks technical efficiency: it is reasonably easy to supply that lack: and the conclusion?

Senator Professor Johnston pointed out that silage was perhaps more convenient for the farmer of 50 acres or more to make than for the farmer of 30 acres or less. It involves a good deal of expensive grass cutting and gathering machinery and a good deal of continuous heavy transport carried on day after day till the silo is full. Anyhow no farmer can do without hay and if the small farmer must choose he should choose hay unless the weather is very bad indeed.

It is possible to learn much from the war time experience of the British in their magnificent agricultural effort. Possibly their methods were more persuasive and democratic and therefore less dictatorial than ours were. It is a pity our County Agricultural Committees were not encouraged to play the part played by the County War Agricultural Committees in England. In our case there was nothing to check the rapacity of tillage

contractors who absorbed much of the profit of war-time tillage farming and often did bad work. Even now there is much to be said in favour of our County Agricultural Committees owning and operating Bulldozers, mole drainers, combine harvesters, as well as tractors, and hiring them out to local farmers with adequate supervision and expert advice thrown in. The farm Improvements Scheme places too much emphasis on the immediate labour content of proposed improvements. The real criterion should be the widest possible margin between prospective increase of productive capacity and the economic cost of bringing it about. If this margin is likely to be of maximum width as a result of using an expensive machine and little labour in effecting a drainage scheme or other improvement then that method should be used. Increase of agricultural output will automatically cause increase of employment both on the farm and in non-agricultural occupations.

There are far too many cattle farmers in Éire. A plan for their Euthanasia is needed. If the land Commission must appropriate farms its administrative and judicial power might well be increased provided its economic outlook and objectives are widened. Cattle farms, judged to be such by an impartial tribunal, should be compulsorily acquired for state ownership at a fair market valuation but not for division into uneconomic so called "economic holdings." They should be left in the most convenient size for the type of agriculture appropriate to them and public money should be spent on their rehabilitation and permanent improvement. They should then be let on lease for a twenty-one year period to suitable persons with enough capital to stock and work them and preference should be given to young married farmers or farmers' sons who had done a successful course at an agricultural school or college. The rent charged should be an economic rent which would fully cover interest on the capital cost to the state of providing the farms.

As for ley farming the recent Majority Report of the Committee on Post-Emergency Agricultural Policy has most vigorously recommended it as thoroughly suitable to Irish conditions in most parts of the country.

Mr. R. J. P. Mortished thought that Mr. Fitzgerald's description of the position in Britain might perhaps have been rather different if he had been dealing with the period before the war. The pressure of war made it possible to get many things done by creating a sense of urgency and a general will to action. The atmosphere here was very different; we were much too ready to assume that we were all inefficient, if not corrupt, to blame all our deficiencies on the Government, to denounce the Government as a dictatorship, and in the same breath to demand that the Government should do many things that could quite well be done by citizens themselves. It was refreshing to hear Mr. Fitzgerald speaking in a spirit directly opposite to this defeatism. It was to be hoped that, as Dr. Kennedy had suggested, we had now passed through the necessary series of disillusionments and were on the eve of really energetic and self-reliant action. But there were practical problems of organisation still to be considered. The first was finance for farmers, and especially small farmers, would require financial facilities if not financial help. What were the financial relations between the farmers and the County War Agricultural Committees? Perhaps we had been paying too much attention to the problems raised by a multiplicity of small farms. In the Soviet Union fact they appeared to be subject to the most rigorous and detailed control by the State, made possible by their complete dependence for farm machinery on the State Machine and Tractor Stations. Were the County War Agricultural Committees in Britain enabled to exercise effective

control over unsatisfactory farmers through their virtual monopoly, owing to war shortages, of machinery? Indirect control in this way might be of great significance to us.

Father Coyne had mentioned the Vocational Organisation Commission's proposal of an elected Director of Agriculture for each county or district. Mr. Fitzgerald had not raised the point, but Mr. Mortished thought that the members of the County War Agricultural Committees were nominated by the Minister and not elected. It would be interesting to learn Mr. Fitzgerald's views on the issue of election or nomination for purposes of agricultural organisation, in the light of his experience in England and of conditions in this country.

Mr. Fitzgerald said that his paper was in no sense intended to be controversial; it was an attempt to give an entirely personal account, within half-an-hour, of experiences spread over two years.

The discussion showed that perhaps this object had been achieved since Father Coyne, who spoke first to the paper, found, it seemed to the writer, nothing with which to disagree but much to expand. He re-stated the agricultural problem of Ireland and seemed to agree with the writer that this in its essentials was a question of raising technical efficiency throughout the country, and he seemed to pin rather more faith to Parish Councils and the Men of the Land than the writer considers justified by the present facts. There is no doubt that, if lethargy could be overcome, Father Coyne is right.

Senator Johnson was surprised at the omission from the paper of much reference to hay. The writer holds the view that where good hay can be made it should be made; but he is strongly of opinion that good silage is infinitely to be preferred to bad hay, or indeed medium quality hay. The paper, however, was dealing specifically with the National Silage Campaign in England, and thus there was a tendency perhaps to overstress the silage aspect. It might be well to point out in this context that the severe Compulsory Tillage Orders in Great Britain had and have materially reduced those acreages which would normally be devoted to hay.

The writer was interested to hear the contribution of Mr. Harnett. An increase in veterinary scholarships in Ireland, the raising of the already high standard of the profession and, above all, much closer general attention to the incidence of animal disease, would be of incalculable benefit to Irish agriculture as a whole.

Mr. O'Hegarty, it seemed to the writer, overstressed for Irish conditions the position of the townsmen. Dublin is already too big to be supported by a poor agricultural community living on small farms, and more needs to be done to impress this upon the inhabitants both of this city and the other large towns of Ireland.

It was Mr. Mortished in the writer's opinion, who exposed the essential weakness of the paper, because it is perfectly true that application to a war effort is probably not enough, and that the stimulus of guaranteed high prices is also needed. It was Mr. Mortished who drew attention to the lamentable state of British agriculture in some of the years between the wars, and the writer has first-hand experience of deserted farms in Norfolk where the standard of farming nowadays and in the distant past is and was probably the highest in the world.

As usual Dr. Kennedy put his finger on the besetting sin of all farmers living in a climate of heavy rainfall on a soil which will grow grass. The natural tendency in all such areas is to farm, in Dr. Kennedy's words, by "opening and shutting gates". In the present state of the world this will no longer do.