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THE IMPROVEMENT
OF
CRICKET GROUNDS
ON
ECONOMICAL PRINCIPLES.

BY
J. A. GIBBS.

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HORACE COX,
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INTRODUCTION.

My apology for the following observations is merely that I have noticed from time to time, in the course of my wanderings over this cricketing country, and in India, that much money (to say nothing of trouble and worry), is annually expended in making and improving cricket grounds. As far as I am aware, no practical treatise on the subject has ever appeared in print; at all events I have never come across one. I have thus been compelled to trust to experience alone. And perhaps there is nothing more interesting to the lover of cricket, than to observe the different sorts of ground, good, bad, and indifferent, which are met with in the course of a cricket season. When a boy at school, I made a ground at home, which, to begin with, was one of the worst I have ever come across. By a series of experiments, extending over five years, I at length succeeded in turning that ground from a very bad one into a very good one; but many a time I despaired of ever making it good enough, even for practice. Since then, I have gained some further experience on other grounds. And of this I am certain, no amount of expenditure can make a good ground, unless it is backed up by ordinary common sense. While, on the other hand, the best results can be obtained by a little method and attention to details, without entailing more than a nominal expense. The greater part of the matter contained in these pages, is a reprint of articles that have appeared

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recently in the *Field*. They were written for the benefit of village clubs, and must be taken as such. Economy is the leading principle; and the various methods suggested are simple in the extreme. With county cricket grounds I do not wish to deal. As, however, a perfect wicket cannot be improved upon (and I have known several grounds perfect in every respect made by the methods advocated in these pages), it would be gratifying to see an improvement with regard to economy on some of our leading grounds. The excellence of our county grounds is undisputed, but we cannot help thinking that the same results might have been obtained with a very much smaller outlay.

During the last twenty-five years' a great change has come over the game of cricket. The improvement in grounds has effected it. In the old days at Lord's, and on most of the public grounds, the bowlers generally had the best of it, now it is all the other way. Nothing but bowling a good length, the use of the head, and the rare power of breaking the ball on wickets that give little or no assistance, are of any avail to dislodge a good batsman.

But while this great change has come over the game of cricket as played at its best, village cricket remains in much the same state as it was formerly. What is the result? Those counties in which there are few good grounds are going gradually but surely backwards. Take Gloucestershire as an example. I know no part of England in which cricket is in a more backward state than in the more rural parts of that county. Nor do I know of a single really good ground within a radius of fourteen miles from my own house. This means that there are no young players coming on. How often one is told of some local crack bowler with an average of two runs per wicket! If he is asked to bowl on a good wicket, he sends down nothing but half volleys and long

hops, while the more he is hit, the faster he bowls. He is accustomed to bowl on a bad ground, where any fast ball may get a wicket, irrespective of length.

Surrey and Kent abound in good country grounds; in Somersetshire of late years village grounds have been much improved, although there is still room for more improvement. Those counties that have the best grounds will always turn out plenty of young professionals. Amateurs are not affected so much by the state of the grounds round their homes, as they generally learn their cricket at school and college.

Bad grounds, in addition to spoiling many a promising bowler, ruin batsmen. Their chance is ten times worse than the bowler's. "Hard, and high, and often" is the motto, and as there are no runs to be made by hitting along the ground, and the danger to life and limb exceeds the pleasure of making a few runs, there is no wonder that scientific batting is seldom seen on bad grounds.

With a little time and trouble, and with an outlay of a very few pounds, country grounds can be brought, at all events as far as the pitch is concerned, to a high state of excellence. Good grounds mean good players. We should therefore be glad to see something done towards equalising the conditions under which county and village matches are played. If this little work, imperfect as it is, should be the means whereby some improvement is made in our village pitches, especially in the more rural parts of England, the author will be amply rewarded for his pains.

ABLINGTON MANOR, FAIRFORD,

March 27th, 1895.

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THE
Improvement of Cricket Grounds.

CHAPTER I.

THE CAUSE OF SLOW GROUNDS.

OCTOBER and November are the months during which cricket grounds ought to be made or improved. Nowadays nearly every village has its ground; but the majority of such grounds are so rough that those who play on them are prevented from attaining to any excellence at the game. Our object is to show that, by attention to a few simple rules, it is within the reach of every village to have a really good cricket pitch without any great expenditure.

Not long ago the following question was asked in the *Field* columns: "How is it possible to make a slow ground into a fast one?" Now, as grounds are slow for at least three different reasons, the answer to this cannot be given until some knowledge is obtained of the nature of the soil on which the ground is situated. It is necessary therefore to deal with the three main causes, and, doubtless, under one of the headings this question will be answered.

Grounds are slow for one of the three following reasons:

1. The soil is too light.
2. The grass on the pitch is too thick.
3. The drainage is bad.

The first is the commonest evil of the three; it is at the same time very easy to remedy. Light sandy soil is the worst in every way for a cricket pitch. No amount of rolling will ever get it to bind together sufficiently to make either a fast or a true wicket. The reason of this is obvious. These porous soils do not hold the rain. As fast as it comes down the water soaks through, and leaves the surface as dry as ever. A good slow ground is just as good as a fast one, provided it be true. But a sandy pitch is hardly ever true. One day's hot sun is quite sufficient to make a pitch of this sort absolutely rotten. For the first half hour of a match it may play fairly true. Then ball after ball begins to go wrong. One will get up straight, another will hang, a third will keep low. There is no solidity about the wicket, and so it goes to pieces. By the simple method of top-dressing the centre of the ground with clay, this state of things may be remedied. Indeed, a sandy ground may be easily turned from a very bad ground into a very excellent one, and the trouble and expense need not be great.

All soils consist almost entirely of sand and clay. The best natural soils for cricket grounds are those which contain a good percentage of clay. Whereas a sandy soil has only from 1 to 10 per cent. of clay, a clay loam has from 70 to 90 per cent. The best grounds are those which are situated on a loamy soil, which contains about 50 per cent. of clay. If, therefore, sandy grounds are dressed with stiff clay, the two soils combined will give just about the right consistency to the pitch.

METHOD OF TOP-DRESSING A PITCH THAT IS BAD AND SANDY, IN ORDER TO MAKE IT FAST AND TRUE.

Some time in October or November several cartloads of clay, or soil that contains a good percentage of clay, should be procured and taken to the middle of the cricket field.

Clay can be obtained in nearly every part of England, and is most inexpensive. Having got the clay on to the pitch, it should be strewed about in lumps, and left until, by the action of the frosts, it has become brittle. It should then be broken up as small as possible, until a layer of clay dust has been formed all over the part of the ground that is being dressed. The depth of this dressing should not be less than half an inch nor more than one and a half inches. It is important for the clay to be put on deep enough, as there must be no part of the original soil that is not completely covered; but too much clay will kill the grass.

When once the clay has been broken up nothing more need be done until the following spring. With rainy weather the grass will soon come through the clay. By the following March there will be plenty of good grass on the part that was dressed. Moderate rolling is all that is now required. A heavy roller should not at first be used; clay is apt to be very sticky in the winter and early spring, and a hand roller is all that is needed. Unlike other soils, stiff clay does not require a great deal of rolling. The grass may be injured or killed through being compressed into the clay, and the pitch will become too bare. It is needless to add that no rolling should take place until plenty of grass has come up. A few days' hot sun has the effect of furning soft clay when rolled into the most beautiful wicket imaginable; when there is only an inch of clay on the surface and sand underneath the drainage is always excellent; for this reason these pitches are, on the whole, preferable to any other. A ground that is formed entirely of clay will be very good in dry weather, but in wet it often becomes too soft to play on. Lord's is an instance of this. The depth of the clay on that ground is sufficient to prevent cricket being played there on days when on many grounds it is quite possible. In 1892 and 1893 Lord's was at its best, owing to the continual fine weather.

So simple and cheap is this method of improving bad grounds, that it is within the reach of village cricket clubs and of every owner of a cricket ground.

It is necessary to add that, after three or four years, it will be advisable to repeat the operation, as worms will have brought some of the sand up to the surface. After the first application the dressing need not be put on quite so deep. On some grounds a very thin sprinkling of clay is sometimes used; this is a very bad plan, as the ball will come different paces; there will be small patches of clay on some parts of the pitch, and no clay at all on others. Where economy is an object, only enough ground for a few pitches should be dressed. In dry weather these clay wickets are so durable that match after match can be played on the same spot. When once they have got hard they will be just as good at the end of a three days' match as they are at the beginning. In very wet weather it is advisable to play on the original soil, and several wickets should be prepared on that part of the ground that has not been dressed. On wet days a sandy pitch plays a great deal better than it does in fine weather, and no amount of rain will make it unfit to play on. The clay, on the other hand, becomes rather sticky after much rain, and it should, therefore, be reserved for fine weather. But so well does the sand underneath it drain the ground, that one fine day is generally sufficient to make the pitch fast again, even after very heavy rain.

It will be found when once these dressed wickets have got hard that the ball will come along at a tremendous pace from the pitch, but will never "get up" badly. Occasionally, as at Lord's, balls will keep rather low, but this does not matter; back-play is almost entirely dispensed with on these lightning wickets, and the chances are much in favour of meeting the ball with forward play.

It is difficult to explain why some balls keep so low on

these clay grounds; they do not exactly shoot, but come along at a great pace an inch or two above the ground.

It is only during the last ten years that this method of dressing sandy grounds with an inch or more of clay has been widely adopted. Even now there are hundreds of grounds in England where it ought to be made use of. It is extraordinary how few ground-men are aware of the beneficial effects of top-dressing poor soils. We have known cases of sandy grounds being entirely relaid at enormous expense, an operation which is generally useless. In places like Aldershot, where the whole country is sand, a cricket ground worthy of the name cannot be made unless the centre of the ground has a top-dressing of clay, and many places in that neighbourhood could be pointed to where excellent wickets are prepared by this method.

If strict attention is paid to details, this method is certain to be successful. The consideration of the two other causes of slow wickets connected with the grass and drainage must be left for discussion in another chapter, when a few observations will be made on the treatment of cricket grounds generally.

CHAPTER II.

OTHER CAUSES OF SLOW GROUNDS.

WHEN there is a thick growth of grass on a pitch the soil is protected from the drying influence of the sun and wind. Again, thickly covered wickets are very retentive of moisture; not only will the dew remain on them all day long, but rain will not evaporate freely. Such grounds will often take many weeks' fine weather before they become hard and fast; whereas under the influence of a hot sun they should be fast in three days.

It is not unusual to find, on examining a wicket just before a match, that much rolling has taken place previous to the mowing machine being used. Two great evils result from this error on the part of the ground man. In the first place, so much grass is rolled down flat that when the mowing machine goes over the pitch the knife takes very little off; secondly, although the wicket may appear to the eye to be perfectly level, there may be dozens of small holes in it. These holes may have been merely filled up with grass, and until play begins their existence may never be suspected. Unless the ground be very wet, it is impossible to roll out holes when the grass over them is thick and matted.

Another disadvantage in having too much grass on a pitch is that there will always be something for the ball to catch hold of. So that, even if there are no holes, the bowler will be able to get a good deal of work on the ball.

Whether this cause of slow grounds is due to the above

mistake on the part of those who look after them—or whether the grass is naturally too thick—the following treatment will generally be found effectual, simple though it may appear.

When a ground is being got ready for a match—an operation that ought to take place fully three days before the wicket is to be used—the first thing to be done is to mow off as much grass as possible with a hand machine, set very low. A large mowing machine drawn by a horse is of no use where the grass is much matted. It is no use running the machine once or twice up and down the pitch, as is generally considered sufficient. It will be found that the tenth time over, the knife will still be cutting off a certain amount of grass. If there is still too much grass on, though the machine no longer cuts it, the pitch should be well brushed with a broom, and then cut again. An immense amount of grass can thus be cut off; and there are very few grounds that will not become fast if thus treated, always provided that the other conditions of soil and drainage are favourable. For the sun will now be able to get at the soil.

A close inspection of the centre of the ground at Lord's will show that there is so little grass on the actual pitch, that the wicket is like asphalt in dry weather; if there was a thick carpet of grass to protect the clay from the sun, Lord's would very seldom be fast.

It has already been said that wickets should be prepared fully three days before a match. On properly managed grounds all the rolling should have been done in February and March. As, however, this paper is not written for the benefit of those who look after first-class grounds, so much as for those who have the management of village or private grounds, the fact has to be taken into consideration that the preparation of the wicket is often put off till within a few days of a match. It should be apparent

to everyone that an hour's rolling in February, when the ground is really wet, will do more good than a whole day's rolling in May. Nevertheless, it is very seldom that any but public grounds are prepared early enough in the season.

It is a great mistake to drag an enormous roller up and down a pitch for any length of time the day before a match is to be played. If a hard and fast wicket is required, it is a still greater mistake to use a heavy roller for half an hour or more just before a match. Such treatment is very likely to make the ground slow; for on most of the best grounds it is always possible that heavy rolling will bring water up to the surface, unless there has been a long spell of fine weather. Grounds are generally at their best when they have just become fast, after a few fine days following heavy rain. It is in this state, when they are neither too dry nor too wet, that heavy rolling is apt to render them slow again. The writer has often played on grounds where the pitch has been spoilt in this way, while the fielding portion has been quite fast. It will be seen from the above remarks why it is important to prepare a wicket at least three days before a match. Ten minutes' mowing with a machine should be all that is required to be done to a pitch on the day of a match.

The removal of all weeds from the pitch should be carefully carried out in the winter. Plantains should never be allowed to remain. If this is done there will seldom be too much grass left.

Returfing will have to be resorted to if continual cutting will not take the grass off a pitch. It is unnecessary to explain how to lay down turf, as the process is generally well understood. It may be mentioned, however, that the new turf should be procured, if possible, from a common, and should be made up of fine grass, free from weeds and clover.

Too little grass on a wicket is a bad thing. Grounds that are quite bare are sometimes apt to crumble; the roots of the grass help to hold the soil together. Where there is very little grass it should not be continually mown close, but should be encouraged as much as possible, or the sun will very soon kill it.

CHAPTER III.

CONCERNING DRAINAGE AND OTHER MATTERS.

EXCEPT for county matches or where money is no object, so long as water does not stand on the pitch sufficiently to prevent play *no attempt should be made to improve drainage*. For a one-day match a slow pitch is just as good as a fast one, provided it be true. Moreover, a wet ground can very soon be rolled down—a great advantage on village grounds, where frequently nothing is done to a wicket until just before play begins. A slow, true wicket can always be produced at short notice on these wet grounds; whereas, if the drainage is good, a village ground is apt to be exceedingly dangerous.

When a cricket ground has once been made in low-lying meadows, it is best to put up with a slow wicket or make a new ground somewhere else, rather than attempt to improve the drainage. Should, however, in spite of the trouble and expense involved, anyone be desirous to make a fast wicket in a badly drained field, there are two courses open to him. The ground may be drained by means of pipes, or some of the heavy soil in the centre of the ground may be removed, and a lighter and more porous soil substituted. The system of draining with pipes is fully described in all the leading works on agriculture, and it is therefore unnecessary to deal with it here. As a general rule, if carried out properly, it will have the desired effect of making the ground drier and therefore faster.

The second method of draining is briefly this. The centre of the ground, where the wickets are usually pitched, must be taken up and the soil dug out to a considerable depth. It is impossible to set down exactly how much soil ought to be removed, so much depends on the depth of the soil and the nature of the subsoil; but, where the soil is heavy—as it will be in nine cases out of ten when the drainage is insufficient—the more soil removed the better.

Supposing that a foot or more of clay or loam has been removed, a layer of chalk or light sandy soil must now be put down. The depth of this will, of course, depend on the amount of soil that has been removed. If 1ft. of original soil has been taken away, the layer of chalk* or light soil will be about 6in., and the remaining 6in. should be filled up by the turf and a small portion of the heavy soil that had been dug out.

Road-scrapings may be used for this purpose when chalk or sand are not available, but they must not be put down as a top dressing on sandy grounds; they are far too light and porous, and will cause any ground that is dressed with them to become dusty and much given to crumbling.

One of the great difficulties that have to be faced in substituting any of these porous substances for clay is that, unless the soil is vigorously rolled and pounded, and unless a considerable length of time is allowed to elapse before the turf is re-laid, sinking is ultimately liable to occur.

For this reason we are far from advocating this method of improving the drainage on a clay wicket; although when time is no object, it can be carried out successfully.

In some cases it has been found advisable to postpone the re-laying of turf for a whole year in order to allow the

* Chalk or ashes must be deposited at a greater depth from the surface than is required when sand is used. Sand may be put down at a depth of 4in. only, or even less.

newly-laid material to settle. If, however, the work can be commenced at the end of August, and as fast as the new material is put down it is tightly rammed, and if the surface is raised an inch or two above the rest of the ground, the turf may be re-laid in the following December.

I have merely glanced at this remedy for badly drained grounds, but I do not advise any village club to adopt it, nor can the space be spared to deal fully with it. I repeat that in ninety-nine cases out of a hundred no attempt need be made to improve the drainage of cricket grounds. On all grounds no method should be adopted that is not simple in the extreme; and, as this matter is somewhat complicated and difficult to carry out successfully, it does not really come within the scope of a treatise, the leading principles of which are simplicity and economy.

It will be seen that this wicket is almost identical with the one described in Chapter I., on the improvement of light and sandy soils. In one case, clay is put on the top of sand, because the sand by itself is incapable of holding sufficient water; in the other, sand is deposited under clay, because the clay does not allow sufficient water to drain away. It cannot be said, however, that the latter plan is to be recommended in the same way as the former; it is far more expensive, and does not succeed so invariably.

There is another occasion, however, when it is highly advantageous to substitute soils; the converse of the method I have just described. Many grounds are fiery and dangerous owing to the soil being too shallow. Gravel will be found at a depth of 3in. or 4in. from the surface; and in order to remedy this defect 6in. or more of this gravel must be removed and loam substituted. A foot of loam on the top of gravel subsoil is an ideal foundation for a cricket pitch.

Some years ago part of the Christchurch ground at

Oxford was treated in this way with very satisfactory results. In dry weather this ground used to be very fiery, and still remains so, except in that part which has been improved by the substitution of loam for gravel; a perfect wicket is generally obtained on this ground when the wickets are pitched on the improved portion of it.

There are one or two minor details which have not been touched upon. Watering is a subject which is very often but little understood. On grounds that have been properly prepared in the spring, watering should never be necessary, except in a drought. If the soil is a stiff one, the water should be put on the ground at least five days before a match, and the rolling should be done as soon as possible after the water has soaked in. It is a good plan to put the water on late at night, and to commence rolling early the following morning. If a fast wicket is required, heavy rolling should not take place within three days of the wicket being required.

It is often laid down, as a hard and fast rule, that no ground should be watered on the day of a match. When a wicket is bad and sandy this rule does not hold good; for the only way to obtain a moderately good wicket, without top-dressing with clay, is to water freely on the morning of a match, or at latest the evening before, and to roll almost simultaneously. By this means the sand may be induced to hold together for a time; and the wetter a sandy wicket is the better it plays.

Watering on the day of a match sounds like a very desperate remedy, and it is certainly one that will not recommend itself to many people. But anyone who has played on a real sandy wicket, will agree with me that from a batsman's point of view, a worse state of things could not possibly be imagined.

Water of course should not be put on to a ground, except in the early morning or in the evening, unless the

day be a cloudy one. It is a waste of time watering a ground when the sun is shining brightly, as most of the water evaporates. Besides which, the grass is very liable to become scorched and die.

Another detail that is sometimes overlooked is the removal from the pitch of the small heaps of earth which worms have raised. If these are not removed by the mowing machine, or swept away, they will very often make spots on the wicket, and cause it to be very bumpy and dangerous. These worm-heaps are the ruination of many wickets that would otherwise be perfect. In wet weather they make little or no difference. But when the ground has just become hard, to roll them is the greatest mistake. The earth cannot be pressed back into the soil, and is therefore rolled down on to the surface, and a series of small lumps are thereby formed, often hardly noticeable at first sight, but very apparent when play begins. On clay or loamy grounds, worm-heaps, besides making the ball bump, are extremely likely to kill the herbage underneath them, should they be rolled tightly down. Thus, unless rain falls within a few days or the ground is watered, bare spots will result. These spots, even supposing they can be rolled down quite flat, are very likely to crumble. If they do the ball will come different paces and will often keep very low after pitching. One has only to take a cricket ball and let it drop once or twice on to a spot of this kind, to find how very soon that spot will be broken up into dust. No soil will stand the wear-and-tear of cricket unless there is some grass to hold it together; and those spots that are not held together by the roots of the grass will always be the first to crumble. I have dwelt on this point at some length because it is one of the most important of the many details that must be attended to, more especially on clay grounds. A ground man, who is rightly considered an authority on

the subject, told me last summer that he made a point of rolling these worm-heaps down, as they bound the pitch together; I cannot agree with this theory, as I hold that any soil to be really binding must be held together by the roots of grass; and on any ground with which I had to do, I should always insist on the small mowing-machine (with collecting box on) being used, instead of the roller; by which means the heaps are entirely removed. While on the subject of mistakes that lead to bad wickets, there is a rather common practice in country places of trying to get rid of holes in a pitch by raising the surrounding turf with a fork and pounding it down again. There is no objection to this process if it is carried out a week before the wicket is required; but on the morning of the match it is fatal. Pounding has the same effect as a heavy roller. The water is squeezed up, and those spots that have been so treated become soft and treacherous, while the rest of the pitch may play fast and true.

The author recollects a man who had a great, heavy implement specially made for this purpose; and on the morning of a match he used it freely, with the result that his pitch always presented a series of surprises to the unsuspecting batsman, that few were able to withstand.

When a wicket has been properly prepared three or four days before it is required, there will seldom be any holes to be seen on it on the day of a match. Certainly there is the chance of heelmarks damaging it in the interval should the ground be very soft; in which case the roller must be used and will be found sufficient. For in rainy weather, when the ground is thoroughly soft, the rule we have laid down with regard to keeping the roller off the wicket for a few days previous to a match hardly applies. It is only applicable when there is every chance of a hard wicket.

Passing now to the question of mending a ground, that is to say, filling up holes made by the bowlers in the

course of play, it may be stated that new turfs should be filled in at the earliest opportunity, unless the holes are quite shallow; the roller will then be all that is required.

With regard to bare places, caused by the ordinary wear-and-tear of cricket, little need be said. The grass will generally grow again without any treatment being required.

If, either at the beginning of the cricket season or later on, it is thought desirable to sow some seeds, care must be taken to loosen the soil by raking; the surface of a cricket pitch becomes too hard after rolling to allow of seeds taking root, unless it is well raked; a little mould may be sprinkled over the sown parts, and the roller must be passed over them once or twice but no more. Our experience is that it is most difficult to get seeds to grow on that part of a ground that is being rolled continually. It is necessary, therefore, to leave the sown parts absolutely alone until the young shoots are well up, and even then it must be remembered that heavy rolling is liable to damage them. Never sow clover on a cricket ground, it holds moisture terribly. True, it gives a nice green appearance to a pitch, but this is no real advantage.

CHAPTER IV.

ON MAKING CRICKET GROUNDS.

IN choosing the site for a cricket ground, the first thing to be done is to get the best possible light. It is, of course, necessary that the sun should not be directly behind the bowler's arm towards evening, and the wickets must, therefore, be pitched north and south rather than east and west. If possible, let a spot be chosen that stands higher than the surrounding country. In this case the light will very often be good, and, in addition to this, the ground will be better drained and more likely to play fast. It must be remembered that the best possible light is found on those grounds where there are neither houses nor trees immediately behind the bowler's arm, and where the open sky is the only background. This is only to be found on high ground, or on large, open commons; nevertheless, it is generally possible to avoid having to make a cricket ground on a spot that is completely surrounded by large trees. Where bowling screens are used to improve the light, they should be at least 12ft. high and 16 yards wide, and at a distance of not more than 80 yards from the batsman at the far end. It is better that no canvases should be used unless they can be made high enough to answer the purpose for which they are meant. (*See Appendix.*)

Having settled the question of light, the next step in making a cricket ground is to lay the turf for the pitch. This is a very much simpler process than is generally supposed. Given an ordinary grass field, well-drained

enough for agricultural purposes, there ought to be no great outlay required. All that should be necessary is to take up the turf, level the soil underneath, and replace the old turf again. A piece of ground 24 yards square is ample to give twelve different wickets during the season, and those twelve wickets should be capable of being played on at least twice.

In nine cases out of ten the original turf is good enough to put down again, provided it is properly treated after it has been laid. Should it be of bad quality, full of weeds, and the soil poor and sandy, it is strongly advisable to procure turf from a common for making the wickets. There is nothing like good down turf; it is not always to be procured, unfortunately, and there will, of course, be the extra expense of carting it, should there be any to be got close at hand. The extra outlay, however, will generally be found well worth while. Whether the original turf is used, or down turf is imported, it is advisable to take out as many weeds as can be found in it. Plantains are the worst weeds of all, and dandelions, crowfoot or buttercup, and thistles are very undesirable. Daisies are of course bad where they exist in large quantities to the exclusion of sound herbage, but a few do very little harm. Weeds are certain to appear again the following summer, however thoroughly they may appear to be eradicated in the previous autumn. Many roots, invisible in October, will spring into life; but there should be no difficulty in keeping them down, provided that all that can be found in the autumn are dragged out.

Of all the causes of bad and dangerous wickets, and of all the sources of annoyance to those who look after cricket grounds, by far the greatest is the common or garden "plantain." It is the kind with broad leaves that is so harmful. There are no less than three different ways in which the plantain exercises a damaging influence on a

cricket pitch. The first and foremost is, that whenever a ball pitches on the centre or heart of the plant something unpleasant for the batsman is certain to happen. A rap on the fingers is the most common result, but on the other hand, it may be a "shooter." Secondly, no grass will grow under their broad leaves, and therefore every plantain on a pitch means a bare patch, often of some size. Thirdly, the soil under those leaves will remain soft long after the rest of the ground has become hard and dry; result—the ball will come off these spots at a different pace. Many are the remedies that have been suggested from time to time, from the ingenious contrivance* invented by (I believe) Mr. Mark Napier, down to the application of table salt. By the former the plantain is extracted root and all, together with a neatly cut piece of turf two or three inches deep; the hole is then filled in by another neatly cut turf of exactly the same size, and cut out from some other part of the field by the same instrument. I have always adopted the simple plan of cutting off the leaves of the plantain, and applying a little common salt to the root. But I have fortunately never been very much troubled with these weeds. They should be cut out when *very small*, in the spring, as fast as they appear, together with the roots, and if a careful look out is kept for the appearance of small plantains, and they are frequently kept in check throughout the summer, they will never grow large enough to give much trouble. It is because they are neglected when first they appear, that they become so troublesome in the cricket season. A large plantain cannot very well be cut out in dry weather in the middle of the summer, as more harm than good may be done to the pitch. Much may be done to prevent the presence of a few plantains on a

* The "Napier-Cunningham Spud."

wicket being specially harmful, by a careful and judicious choice in pitching the stumps. Avoid having them anywhere near the "blind" spot, which is, roughly speaking, about three yards in front of the block-hole.

For the benefit of those who are troubled with plantains on their cricket grounds, we insert the following from the "Rural Almanac" for 1895:

DESTROYING PLANTAINS.—Various remedies which have been found efficacious: A little paraffin poured on the centre of the plant. —Sulphuric acid carefully applied with an iron skewer right down the heart of the plant; without care injury may be done to the grass. —Cut off the head of the plantain and pour a little paraffin into the white root thus exposed. —Pour a small quantity of oil of vitriol into a cup, and apply with a bradawl, with which, after dipping it into the vitriol, pierce the crown of the plant. Great care should be exercised in using oil of vitriol.

I have never had occasion to try any of these remedies, having found common salt answer the purpose; but in this case, the grass may be injured if the salt is allowed to fall on it to any extent. A remedy for moss taken from the same source:

Sulphate of iron has been found efficacious in removing moss from lawns, care being taken that too strong a dose is not given. The average quantity is 6½ lb. for 100 square yards. Use the sulphate in solution, which should be made of soft water, at the rate of 1 lb. of sulphate to two gallons of water. Make it just before it is to be used. It may be applied at any season of the year. The sulphate is known to be acting when the moss turns black. If this does not happen, a second application is necessary. As moss generally indicates poorness of soil, it will be necessary, after it is destroyed, to apply a top dressing of soil with which have been incorporated some rotten manure and wood ashes, and to sow some fresh lawn seed. Plantains should be dug up before the top dressing is applied.

As turf becomes very brittle in frosty weather, a start should be made early in October to make a new ground, and by the middle of November the work should be practically completed. There are, generally, one or two men in every locality who thoroughly understand the laying of turf. The difficulty is to find a man who will

keep the ground in order when it is made. After the turf has been removed by the turf-cutter, each piece being as much as possible of the same thickness, care must be taken to prepare a sound, level bed of soil on which to put it down again. A spirit-level, one or two iron rakes, a flat board or pole of some length, and a small roller, are the implements required. Strings drawn from end to end of the square and fastened by means of pegs, will be an additional help in making a level bed. When the turf is put down it must be tightly packed, and every small crack must be carefully filled in. Pounding and rolling is all that is required to finish the work.

The above remarks apply to the making of cricket grounds on fields that are properly drained. The question of drainage should not come in to the making of a cricket ground, for a properly drained field should always be chosen at the start. If it is found necessary to make a ground in a field that is not sufficiently drained, the matter should be put into the hands of a competent agriculturist, and when it has been set right, it will be quite time enough to start the operations necessary for making a cricket ground.

CHAPTER V.

ON MAKING GROUNDS (*Continued*).

THE plan of putting down ashes or chalk is absolutely useless on a properly drained field, and it is only in towns or in certain low-lying districts that it is necessary to start making a ground in a field that is not properly drained. Ashes are sometimes put down with the idea of getting rid of moss; manuring, or the use of a small iron rake and a little lime in the spring of the year will generally get rid of most of the moss on a pitch, and, provided the grass is kept short all the summer, there will be very little moss during the cricket season. Ashes, to be of any use, must be put down at a depth of 6in. or 8in. from the surface, and to accomplish this the ground will have to be dug out to a considerable depth. This involves a lot of trouble and expense in labour, as anybody will find out if he will dig out the soil to the depth of 1ft. on a piece of ground 24 yards square. There are many grounds in England that are rendered unfit to play on because ashes have been put down and are constantly working up to the surface, and this is the great danger in using them.

If it is thought desirable to have the fielding ground almost as good as the actual pitch, this can be accomplished in a very short time by the use of a heavy roller. It is a great mistake to take up the turf for the mere purpose of improving the fielding ground. A few weeks' rolling in February, and the use of the mowing machine in April, will transform any flat field that has been previously fed by sheep into a lawn. That lawn probably would

be unfit for a cricket pitch, as most lawns are ; but for fielding it would be quite excellent. Returfing should never be necessary for fielding purposes in the country, where there ought to be no difficulty in finding a field flat enough for the purpose. In a town it may be necessary to take any sort of field that may be convenient and easy of access, and it may be then necessary to go to great expense in levelling the whole field. It is not generally known, however, what an immense amount of difference a roller will make to a field, and we have known excellent grounds made without any returfing at all.

Should the soil be a very dry and porous one, after the turf has been relaid on the part of the field that is intended for pitches, a top-dressing of clay or loam will be necessary. The method of using clay as a dressing for sandy soils was fully described in a former article. It cannot be too strongly pointed out that, unless every detail in the treatment then advocated is strictly carried out, failure may be the result. An inch of clay all over the pitch should be ample. Great care must be taken not to put the dressing on too thick, otherwise the grass may be killed and never come through. The bush-harrow is sometimes used on a dry, frosty day, to work the clay into the ground, but it should be used sparingly. The roller is, of course, fatal.

I mention this as not long since a case was brought to my notice in which a man, acting without instructions, rolled a piece of ground that had been dressed with clay, before the grass had come through. The result was that no grass came up, for it was unable to force its way through the rolled clay, and the pitch was almost as bare as a turnpike road all the year. Despite this fact, the ground played infinitely better than it had in its previous sandy state. Most people, however, like to see a certain amount of grass on a wicket, so it cannot be too strongly

impressed on those who have the care of grounds that pitches that have been dressed with clay must be left alone until plenty of grass has come through. On some grounds that were found to be too dry for a cricket pitch the plan has been adopted of taking up the turf and putting a bed of clay underneath. This is a very expensive process, and not half so effective as using a shallow top-dressing, for the sandy turf was allowed to remain on the surface, and very little improvement was effected.

The fact is, thousands of pounds are wasted year by year on cricket grounds. Grounds are returfed over and over again, only to become worse, if possible, than they were before. The reason is not far to seek. Men who play cricket and have grounds of their own will not, as a rule, bother their heads about the management of them. They leave it to the professionals, who, with a few notable exceptions, are often sadly unobservant. They do not seem to use their heads in the least, nor will they learn and benefit by experience. It is an extraordinary thing that out of the thousands who play the game well so few are able to manage their own grounds. A ground is getting worse and worse every year, breaks up quickly, and plays abominably, and the usual comment is, "The turf is old and rotten, the whole thing wants relaying."

Now, everybody should at least know that turf cannot be too old. A common gives the finest turf in the world for a cricket ground, because the turf has never been relaid within the memory of living man. Depend upon it, a ground that is rotten will only become worse if it is taken up and laid down again. All that is required to make it a perfect wicket is a dressing of clay or loam, and until those who have the management of such grounds discover the fact that it is to the sandy nature of the soil that are to be attributed more than half the bad cricket grounds to be met with, there will never be any improvement.

CHAPTER VI.

COST OF CRICKET GROUNDS.

I HAVE often been asked to state what amount of money ought to suffice to make a good cricket ground. Naturally, the cost will vary very much according to circumstances. In some parts of England labour is very cheap, in others very dear. Then, again, it may sometimes be necessary to choose a field on account of its being convenient of access, rather than because it is specially adapted for a cricket ground. To make a ground in the immediate neighbourhood of a town, or in any locality which is very hilly, is no doubt in some instances likely to prove expensive. Much levelling, and even draining, may be necessary. On the other hand, where no restrictions exist, and where, as is generally the case, there is a large choice of ground available, a cricket ground can be made, and made well, at a small expense. It is not often that much will have to be done in the way of drainage, for when a pitch has once been made, the grass on it is, or ought to be, kept short by the use of the hand mowing-machine, and the surface of the soil will be kept dry by exposure to the sun and wind. It does not therefore follow, that a field that remains soft throughout the summer in its natural state cannot be made into a good cricket ground. The protection afforded to the soil by a thick growth of grass, such as is to be found in most pastures in summer, will be quite sufficient to make a field soft. Should that grass be removed once a week by the machine, there is every likelihood of the ground

becoming quite hard and dry. Let no one, therefore, be deterred from making a ground in a field that is well adapted for the purpose, except that it at first sight appears rather too soft.

Many a ground that is flooded in winter, may be quite hard and dry in the cricket season. At the moment at which we write the "playing fields" at Eton are for the most part under water. Yet in fine weather in summer most of the grounds play fairly fast, though, as far as we are aware, none have been specially treated in the way of drainage except "Upper Club."

Contrary to general opinion, grounds that lie close to the bank of a river are not invariably slow. For the river fulfils the purpose for which it was meant, and drains the land through which it flows. Last winter, I made a ground on the banks of the Coln in Gloucestershire, and the actual pitch was laid about eighty yards from the stream, and not more than 18 inches above the level of the water. Nothing was done to the pitch, except that the turf was taken up and put down again in the ordinary way, and we were told on all sides that the ground would be a terribly slow one. However, the drainage turned out to be so good that for our first match at the end of April we had to water the wicket artificially! April was of course a very dry month, but the soil and sub-soil in this instance happened to be exceedingly well adapted for a cricket ground, there being about a foot of rich mould, covering a gravel sub-soil. A ground close to a river may often be a slow one, but the reason will probably be found to be one of the three to which we have already devoted a chapter. Either the soil is stiff clay to a great depth, or is very light and sandy, or thirdly, there may be so much grass on it, that the soil never gets the benefit of the sun and wind. In nine cases out of ten No. 1 is the cause. A slow ground, if

caused by too much moisture, at all events has the advantage of being easily worked. The roller can always be used with effect, and therefore a great deal of time is thereby saved in preparing for a match.

To put down any figure, as the exact amount required to make a ground, is, obviously, impossible. All that can be done is to give the results of individual experience, under certain well-defined conditions. I will therefore take, as an instance, a field that was naturally well adapted for the purpose; that is to say, it presented a level surface, and the turf was good enough to lay down again for pitches. The cost of labour is variable, but, *ceteris paribus*, a more or less definite basis can be formed of the outlay required in a large majority of cases. For it is seldom difficult to find a field that is favourable in the two conditions named above.

In the following instance a piece of ground 24 yards square was taken up and relaid in the usual way. Then the whole ground (160 yards square) was heavily rolled day after day, until it was flat enough to take the mowing machine, and after April 1st was mown every week. It soon became very difficult, save by a careful scrutiny, to detect any difference between the part that was laid down and that which had only been rolled. The difference, however, became very apparent when practice took place, and it was soon found that the outer portion, though excellent for fielding, was not true enough for batting.

This ground, on the whole, was as good as most of the county grounds in England, and quite upholds our theory that, given favourable conditions, the actual cost of making a first-class ground need not amount to £20. It must be borne in mind that this sum refers only to the actual preparation of the *ground*; and that the real causes of heavy outlay in starting a cricket-club consist in such

items as building pavilion, and buying tents, scoring-boards and other necessary implements.

The cost of the ground* in question was as follows, roughly speaking:

I. To wages of 6 men for 8 days taking up turf, levelling the soil and carefully relaying, at 2s. 6d. per man per day	£6 0 0
II. Wages of 2 men for 4 days weeding, pounding, and rolling.....	1 0 0
III. Hire of horse, roller, and man for 20 days at 5s. a day	5 0 0
	<u>£12 0 0</u>

As the last item of £5 was connected with the fielding ground, it may be said, for the benefit of small clubs, that the cost of making the actual pitch was £7. A square of the size suggested should give ample room for a dozen matches, as well as practice wickets. For unless there is something radically wrong with the ground, each pitch should be capable of being played on at least twice. Should the soil be a poor one, a dressing of clay or loam can be added with great advantage, if it can be procured near at hand. The additional cost in such a case would only be £2 or £3. It is to be presumed, of course, that the ground is laid in October, which is far the best month for the work. It is seldom one finds good out-fielding in country matches, unless the ground is attached to a private house. The difficulty experienced by most village clubs in the matter, is, that it entails an annual expenditure out of their reach. To begin with, a large mowing-machine becomes a necessity, and a horse, besides a man and a boy, will be required at least once a week to cut the grass. Much can be done to improve out-fielding by

* Size of centre square was 24 yards each way.

allowing sheep to graze on the ground. They tread the ground level, and encourage the finer grasses to grow; for there is no finer manure in the world than that produced by cake-fed sheep. While in anything like a dry season they will eat the grass down as short as if it had been mown with the machine.

Making hay on a cricket ground is of course fatal to the pitch, and even on the fielding part it does an immense amount of damage. The grass, after being mown, becomes so coarse and strong as to prevent the ball travelling along the ground when it is hit. It is, in fact, the cause of the style so often adopted in village matches—that of hitting “hard, and high, and often.”

Too much stress cannot be laid upon the importance of grazing sheep on a cricket ground, and, where no regular man is kept to look after the ground and keep it mown, they are of the greatest service in keeping the grass short.

The expenditure necessary to start a cricket *club* seems a little beyond the scope of our enquiry, dealing as it does exclusively with the ground. There are certain implements, however, which must be provided, and the cost of them must be at least £10. They are—A mowing machine, which can be bought for about £5, and a good large roller, which can often be picked up second-hand for about the same amount, if an agricultural roller is not objected to. These are the implements that are absolutely necessary; fortunately they can often be borrowed. For it is seldom that a village cricket ground is far from the “big house,” and more often than not it is found in the grounds. Sometimes additional expense is caused by the necessity of railing in the pitch to prevent cattle from encroaching; hurdles are perhaps the most economical kind of fence, but care must be taken to fix them well into the ground and strengthen them by means of stakes. The cost of a

sufficient number of new wooden hurdles to serve the purpose should not exceed £2. A cheap fence can be put up composed of wire; but we confess to a prejudice against wire fencing, and have always found hurdles answer quite well. To sum up; under favourable conditions a ground can be made, and a mowing-machine, roller, and fence provided for the sum of £20.

In the majority of cases the simple plan of taking up the turf, levelling, and laying down the turf again, is all that is required. In some cases, this may not even be necessary, for it is often possible on commons or on clay soils to make an excellent cricket ground by means of the roller alone. Ashes, chalk, road-scrappings and other things are often used in the laying of cricket grounds, even though there may exist no possible reason for using them. It is only on heavy clay soils, and where the drainage is deficient, that it is necessary to substitute some porous substance, such as chalk, in order to get the water to drain away.

Elsewhere is given the method of putting down chalk or ashes. As it entails a lot of trouble, and there is often a difficulty in preventing the ground sinking after the turf has been laid, village clubs and all those who are unable to employ men who understand the work, will be very wise in not attempting it. It is best either to find a drier field or else to put up with a slow ground.

No trouble or expense in laying down cricket grounds will be of any avail unless a certain amount of attention is paid to them afterwards. If there is one golden rule that ought, above all others, to be impressed upon those who look after cricket grounds, it is this: The ground should be rolled when it is soft, and the pitch should be prepared in the spring and not the day before a match. This is the secret of good wickets. If the bulk of the rolling is done early in the year—in February or March—the turf will

remain true till the end of the summer. During the cricket season, the free use of the mowing machine and an occasional roll will take away any slight unevenness caused by worms or heels-marks.

In order to show how much can be done in a country place, where labour is cheap, for a small outlay, I append the following account of the work done in making a ground in Gloucestershire:

Wages of six men for six weeks at 12s.	£	s.	d.
a man per week	21	12	0

The work done by these men was as follows:

1. Grubbing up a high blackthorn hedge 130 yards long and filling in the ditch.
2. Taking down and removing a stone cow-shed to hold three cows.
3. Filling up an old gravel pit, varying in depth from 2ft. to 5ft. and about 30ft. square.
4. Taking up and carefully relaying the turf in the centre of the ground. Size of part laid for wickets was 22 yards by 12 yards. Pounding and rolling same.
5. Taking up turf, and picking away stones and earth to a depth of 6in. in order to level a piece of ground about 25 yards square on the fielding portion of the ground; wheeling said stones and earth to the gravel pit, and carefully relaying turf.
6. Taking up and levelling various small portions of the ground that were uneven, and rolling all round.

I trust that none of my readers will now hesitate in making a cricket ground because a few odd gravel-pits, hedges, or cow-sheds are in the way!

In conclusion, it may be added that in a small village, where strict economy may be necessary, a ground large enough for playing half-a-dozen matches may be made for less than a five-pound note. For this number of matches, a piece of ground 22 yards by 10 yards is quite large enough to lay down, while if there is no person in the

village who can lay turf neatly, it may be advisable, rather than have the pitch badly put down, to rely on rolling alone. If a flat piece of ground can be found and a heavy roller borrowed, half a dozen willing hands can make a very good pitch in a few days if they set to work in February and do not put it off till the ground is wanted for play. And this will cost nothing except a few hours labour.

CHAPTER VII.

INFLUENCE OF THE HEAVY ROLLER ON PITCHES.

A DIFFICULT question often arises at the end of the first innings of a cricket match, and it is sometimes no easy matter for the captain to decide. It is simply whether to put the heavy roller on the pitch for ten minutes or not. Many a match is lost or won with the captain's decision on this point, and so much depends on circumstances that it is difficult to lay down any law on the subject. There are, nevertheless, certain conditions of the ground in which there ought to be no doubt.

For instance, a heavy roller should be used in the following case: When a ground is thoroughly soft after long continued rain, the side that goes in first will cut up the wicket badly; the ball will cut a piece out of the ground every time it pitches, and the bowlers will do considerable damage at either end. Under these circumstances it is always to the advantage of the batsmen, after all the broken bits of turf have been swept away, to have a big roller on. But it ought not to be done if the heavy roller is likely to bring so much water up to the surface as to make the ground unfit for play. The light roller would then answer the purpose equally well. The reason for rolling under these circumstances is as follows: When a ground is much cut up, the drier it becomes the more difficult it will play. As long as it is wet on the surface the ball will cut through and go

straight on to the bat. Should it be a fine day, with either a hot sun or a good breeze, the surface of the soil will dry to a certain extent; and if it be allowed to go on drying all day the ball will begin to "catch hold" of the uneven surface and do extraordinary things. But the heavy roller, besides making the pitch flat, also makes it wet again, and the pitch will play easily until the sun or wind begins to dry it. Grounds, whether slow or fast by nature, always play faster than usual immediately after or during rain. I am not considering this state of things, but referring to those pitches which heavy rain has had time to soak into and render slow. Nevertheless the roller, by bringing up water, acts in the same sort of way as rain, inasmuch as it makes the ball "cut through," and therefore makes it easier for the batsman to play.

Having endeavoured to explain when a heavy roller is of use, I now pass on to an instance in which it ought not to be used between the innings; when a ground, though somewhat soft and difficult early in the day, but not soft enough to cut up badly, is drying rapidly under the influence of a hot sun, there is every chance of a hard and fast wicket in the afternoon. Reference is not here made to a regular nasty caking wicket, which occurs but rarely, but one which has been drying for a day or so. In this case only a very light roller should be used; the heavy roller may bring up moisture and make the wicket quite slow again, and perhaps (on a hot day) difficult. To sum up, grounds play easily for the batsman when they are either quite dry or quite wet; therefore, it is the duty of the captain whose side is going in to bat, to put the heavy roller on when the ground is too saturated to give any chance of a hard and fast wicket, and to keep it off when there is such a chance.

The roller has in addition to the power of rolling up water, also the power of rolling it down into the soil. It

must therefore be strongly impressed on professionals, or those who look after grounds, never to use the roller immediately after rain. Many a fast wicket is rendered slow by mistaken ideas on this subject. Water cannot quickly get into a ground that is really hard, and the chances are that if it is left alone the water will evaporate; but rolling is very likely to squeeze it into the ground, and make the pitch very much slower than it otherwise would have been. This applies to grounds at all times, whether before or during a match. Another occasion when the heavy roller ought not to be used is on a crumbling wicket. No good can be done by its use when a ground is in this state, and it will probably crumble it all the more. When a wicket is inclined to crumble, the broom must not be applied too freely between the innings. I have seen the whole surface-soil of a pitch swept away in clouds of dust by a misguided groundman, and very queerly the wicket played in consequence.

CONCERNING CAKED AND DIFFICULT WICKETS.

Once or twice during every season a man who plays cricket regularly will find himself (if a batsman) in the unenviable position of having to go in twice on the same day on a wicket that is "caked." That is to say, the surface of the soil will have dried just to that extent at which the greatest possible amount of "devil" will be imparted to the ball, although the bowler may never in his life have been guilty of trying to put on any break or spin of any sort. The author having on more than one occasion at Lord's and elsewhere found himself on this sort of wicket "bustling for specs." (a common expression among cricketers, which is best explained on paper by writing down two 0's, and joining them with a dash of the pen, so: 0—0), feels himself as well qualified as any man

to make a few observations on caked wickets generally. In the first place they are found, as a rule, on clay grounds that are well-drained, and have very little grass on them, the sort of ground in fact, which, taking the whole season through, is the best and fastest. On pitches with a thick covering of grass a caked wicket is seldom seen, for bare clay bakes under the influence of a hot sun and dries ten times as fast on the surface as those grounds which are protected by a thick herbage. It is not often that one is called upon to play on a real caked wicket, because this sort of ground—if well drained—dries so quickly that the difficult stage is soon passed, while if they are inadequately drained they will generally remain slow and easy. On showery days, with bright intervals, clay wickets will often be difficult at times, though, immediately after the showers, the ground may play easily.

If you happen to be captaining a side, and you come down to the ground on a fine summer's day with the glass steadily rising, and if there has been heavy rain previously, you proceed to make a careful inspection of the pitch. You have now to decide:

1. Whether the ground is too soft to be difficult (at all events at first).
2. Whether it is hard enough to be fast and true.
3. Whether it is just dry enough to be caked.

Being a man of observation (as all good captains are) you will not have much difficulty with the help of previous experience in your decision, especially if you get somebody to bowl a few balls down. In nine cases out of ten you will see at a glance that the state of the ground is either No. 1 or No. 2, and that it is likely to be in favour of the batsman for the first hour or two, whatever may happen after lunch. About twice in a season, if you play

regularly, you will find a caking, difficult wicket. In all three cases you will be desperately anxious to win the toss in the first and second because you want to go in; in the third because you *don't want to be put in*. Let it be imagined that you are lucky enough to win the toss, that it is a cloudless day, and you have reason to believe the wicket is, or will shortly be, a caked and difficult one. Put the other side in, even though they have far the strongest batting side; for by doing so you will probably win the match. About four o'clock you will go in on a perfect wicket, and will have the satisfaction of reading next day in the sporting papers of the feeble display of your opponents and your own brilliant performance with both ball and bat. Should you make a mistake, and put the other side in on a difficult wicket, on a day which though bright and fine in the morning turns out cloudy later on, you may find by the time you have got the other side out that the ground is worse than ever. The match may yet be won, if you will put the heaviest roller you can get on to the wicket for the ten minutes interval. This gives an easy, slow wicket for at least half an hour, during which time your two first batsmen (with hitting orders) will have put at least fifty runs on the board; and it is more than likely, should the sun not come out again, that you will have an easy wicket for the rest of the day. For after rolling the ground will not dry *quickly* unless the sun shines.

I might go on to enumerate other dodges by which matches are won, and won fairly; but we will merely conclude with a little advice to those who, without any desire on their part, and with no experience, find themselves in the unenviable position of captaining a side. We would implore all such never to put the other side in, unless they are absolutely sure that the exact conditions of weather and ground render it imperative. As this very

rarely happens, we might almost say never, put the other side in under any circumstances, unless you have had plenty of experience. As far as we are aware, there is no remedy for putting a strong batting side in on an easy wicket, and a captain who does it deserves to lose the match.

There is an extraordinary belief among a large section of cricketers, that a wet and slippery ground is in favour of the bowlers. If you are captaining an eleven under such conditions, and win the toss, go in yourself if you can bat at all; keep your bat straight and you ought never to get out. You can hit every ball within reach, including good length balls, if you like, and if you don't get a hundred somebody else who follows you, and benefits by your example, will. But whatever you do, never put the other side in on a wet wicket, or on a wet day.

It may be argued by some of the old school of cricketers that grounds are quite good enough nowadays, and that any attempt to improve them is out of place. A properly managed ground, however, will cost no more than a mis-managed one, and it must be clear to most cricketers that the game cannot be played at its best on bad wickets. Cricket on good wickets is a different art to that which is played on a bad wicket. In the one, the batsman defends his wicket against the attack of bowlers trained to a high standard of excellence by reason of the very existence of good wickets; in the other, any bowler who can send in the ball a good pace is certain sooner or later to hit the sticks, or the batsman. Without confidence no batsman can play correctly, and confidence will never come to those who are accustomed to play on bad grounds, when their own person is the first thing to be defended, and their wicket merely a secondary consideration.

APPENDIX.

Bowling-screens (Page 17).—A pair of canvas screens can be provided for about £6. On grounds that are surrounded by trees they are an immense improvement. Screens made of strong calico can be made for less than £1 a pair; on windy days they are liable to tear; but on two grounds we have found them quite good enough for general purposes. If they can be placed on higher ground than the pitch, they need not be so high as 12ft.; and the nearer they are to the wicket, the less height will be required. It is a remarkable fact that on nine grounds out of ten the screens used are not high enough to fulfil the purpose for which they are meant. Boards are sometimes used, but they are rather expensive, and the glare from them is often very trying to the batsman.

Peaty Soils.—The remarks in this work on sandy soils apply also to those that are peaty.

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