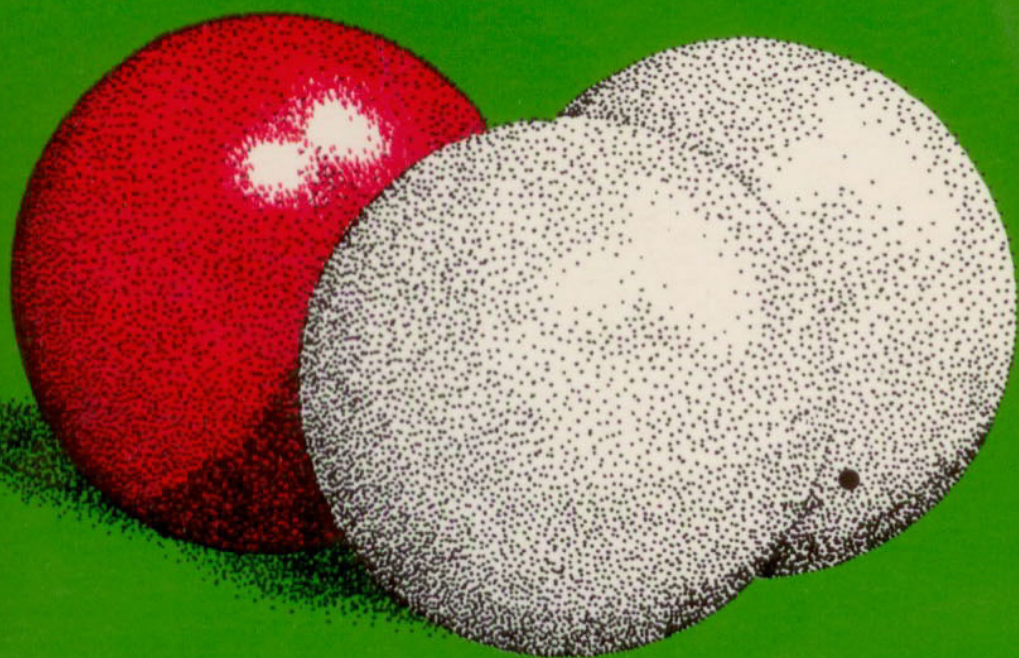


**WALTER LINDRUM**

**BILLIARDS**



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# BILLIARDS

## CHAPTER I

### THOUSAND-BREAK BILLIARDS

**T**HERE is a general impression that thousand-break billiards is something for amateurs to look at and admire, but not to emulate. This is so far true that I suppose I must be right in saying that no living amateur has ever made a thousand break, certainly not in public. But this, as I mean to prove, is due to nothing except lack of a true knowledge of the correct moves of the game. My record entitles me to speak with authority on the scoring of four-figure breaks, and I say without hesitation that a few of the best of our amateurs ought to be scoring thousand breaks at the present time, while hundred-break amateurs should be almost the rule instead of the decided exception.

Change things as I envisage amateur progress, and you will hear much less of that great gulf between amateur and professional billiard players. It is a truism that the difference between amateur and professional form is greater at billiards than in any other sport. That has been the case from the earliest records of the game until to-day, but I feel I can make it a thing of the past to a most gratifying extent if my advice is heeded and playing instructions followed.

I want to do it ; am as keen on it as can be. It is the ideal of my life to see amateurs giving professionals a

sporting game without needing a start which obliterates every semblance of genuine competitive interest. The thing can be done, I am confident of that, but only if my readers will learn from me the secrets I have delved from the game during the concentrated effort of a lifetime, and, in many instances, forget a great deal of what they think they have mastered.

Let there be no mistake about it, ability to make a thousand break was not written on my birth certificate, although my father and grandfather were champions of Australia. This indicates inherited aptitude—I grant that freely and gratefully ; but when I remember that I began my billiards as a child of nine, made a hundred break when I was twelve, and practised six hours a day through the years of my teens, I am going to say that what genius I may have inherited was indeed perfected by ‘infinite capacity for taking pains’, a remark I feel entitled to make without laying myself open to a charge of affectation.

Now, during those years, I did two things. I worked and I thought for myself. My working motto was to stick it until my back ached, and then begin again. Such was the intensity of my daily routine of practice. Mentally, I worked things out in my own way, and I am certain that had I known what I am about to tell you I should have saved myself no small measure of the downright drudgery I had to experience to gain my present proficiency.

It comes out to this, to the old adage that ‘A good billiard player needs the hand and eye of a cricketer and the brain of a chess-player.’ I love cricket, have played it, and am a test-match enthusiast of such calibre that all the harm I wish Old England is a long and fond farewell to those ‘ashes’. Therefore I say,

as a cricketer, that the cricket side of billiards has been badly overdone in the training of amateurs. Too much has been left to the hand and eye; too little to the brain. Consequently, billiard coaching has run on stereotyped lines. There are certain 'set' strokes; flog away at them, and you will learn the game. Well, you may, up to a point, but it will take a deal out of you, and your progress will be far less than you may be certain to attain if you are set thinking on the right lines.

I discovered this as a lad. Bit by bit I absorbed everything great masters of the cue had left for my help, a priceless heritage for which I want to express my gratitude, especially to your immortal wizard of the cue, John Roberts. I saw him play when I was a mere boy; what I saw was then an education and is now an inspiration, for Roberts was a genius at whose feet I am proud to have sat when my boyish billiards began. He is unforgettable to me. Here and now I could play every shot of a break of over six hundred I saw him make. Still, with all reverence to his memory, the world moves on, and there came a day when I had to think for myself, a lone young cueman on a mountain peak so solitary that even the footprint of the great John was not there to guide.

Then I found what I am about to show you. A new prospect opened out. It led me to where I am. I want it to lead you in the same direction as far as billiards can take you as a sport—it meant a career for me. There is that difference, it is useless to disguise it; but what I discovered as a business you can learn as a recreation and become twice the player you are—perhaps a good deal better than that.

No hard-and-fast physical preparation is necessary.

There is a myth to the effect that I train in some special way for my billiard playing. I do nothing of the kind, but I like to take long walks on the springy turf of an open park, with the cool breeze blowing by. There is nothing like the open air for the eyes. It revives them after the strain of playing billiards for a long spell. Regarding things to avoid, any arm work likely to stiffen the arm muscles is not good for billiards. The inner man is better without tobacco or alcohol ; I never take either, but drink tea at all hours. That is my mode of life ; it would be an impertinence for me to seek to impose it on you, but I should like to suggest that the nearer you get to it the better it will be for your billiards.

One thing is certain, first-class billiard playing, both amateur and professional, has no room for those discredited old associations which did the game so much harm in the old days. Billiards is a clean, healthy, manly sport. Take it as you would your cricket and you will do the right thing in spirit. Also, to no small extent, in its material aspects billiards is reminiscent of cricket coaching, or should be. At cricket, you must learn your batting from an adept. You must watch the best batsmen and copy them as well as you can. At billiards, work on the same general idea. See all the professional play you can while you are working at the lessons I shall give you. This will combine progress with pleasure, adding fresh zest to what you see and a new interest of emulation to what you are trying to do.

The emulation is always there, but, to be frank, how dismally hopeless it has been with generations of amateurs, taking them on an average. How often have you seen me make a run of close-cannons, gone

home, set the balls up as they were for me, scored a few cannons—perchance a very few indeed—and then given up, I will not say in disgust, but with a smile of resignation that 'Lindrum's way' can never be yours? I want to change all that, to divert the driving force of that emulation and enthusiasm into a channel of regular and consistent progress

We must begin with one or two of the usual preliminaries. Your cue? You want a good one of your own, of course. Straight, nice-grained wood, as stiff as can be at the weight you fancy, and always well-tipped. If you have any secret hankering after a fresh cue, satisfy it at once before we get to work. You may want a change; your cue may not suit you. This is a personal matter; I will try to fit you with a cue if you write to me at my publisher's address. But do not think of doing so if you have a straight and trusty stick you feel you can do anything with. The vital thing in cue possession is confidence and forgetfulness. Do not mistake me; I am not suggesting that you should forget your favourite cue in a way which may give it a new owner of prowling propensities. My meaning is that, when once you have a cue to your hand and in your hand, forget it as a separate entity. Make it part of your billiard self—so much a connected part that it seems as instinct with life as your cue-arm. Forget it as a separate thing, I repeat, or you will become cue conscious as you play, wondering about your cue instead of your shot, and when you come to this you are in the bewildering vortex of an inferiority complex which can only take you from bad to worse.

So much for your cue. As for handling it, I would rather not dogmatize about that. You can hold it nearer the butt for long, swinging shots, and shorten

it as you play screw or stab strokes. Beyond this very general hint, I want you to begin your thinking right now on the matter of your own cue-hold. Your problem is to deliver your cue with a free, straight swing. Your hand is a miracle in flesh and blood, bone, nerve, and muscle, which nature does not duplicate after the manner of mass production. It is no more like mine than our finger-prints are identical. This means much in a game calling for such precision in hand-control as billiards always does, and whatever I write can only be indicative of what you want. The point is both important and difficult, and to help perplexes me, the more so as I know I vary my cue-hold to cope with all manner of shots. The best advice I can give you is this: if you get results—tangible results—however small to begin with, do not worry about your cue-hold. But if you find you are not hitting a ball as you should and must to gain a desired effect, then you may be certain that your cueing is at fault, and must set about finding a remedy without delay.

To help you with this, I think the best plan will be to note a few common faults in cue-delivery and explain how to remove them. Then you can make your own selection to suit the needs of your individual case. There is a good deal to be said about this, and I fancy it will be better to begin a new chapter with it.



## CHAPTER II

### IN WHICH A SECRET IS REVEALED

**B**EFORE we come to the secret, I have to deal with those common faults in cue-delivery which keep so many amateurs back. The players are not exclusively or even mainly to blame. How often have they been told to hold their cue lightly for every stroke? Times out of number has this advice been driven into them; but, with all due respect to my predecessors in billiard playing and teaching, I must say that I regard this light holding of the cue as a pernicious error. That is, as a universal rule. Naturally, you hold your cue with dainty lightness when playing gossamer-like shots in close-cannon manipulation. But when a stroke needs power, especially screw or stun, then get well hold of your cue and hit your ball with force and decision. In playing effect, this always has been done to an extent never before pointed out.

John Roberts did it commonly. When he played those masterly 'drag' shots of his from hand, the moment his cue struck the ball low and hard his arm hit his side with a thud you could hear all round the room. The action had in it much of the sheer physical power of the half-arm jab of a trained boxer, and when cue hit ball, if his hand had not been holding hard, his cue would have been knocked back by the recoil. Away his ball would travel, almost skidding over the cloth, scarcely revolving until the powerful 'drag' exhausted itself, and whatever ball rotation he had

imparted became the predominating spin and steered the ball to its destined objective

Roberts was wonderful at these 'drag' shots. He had to be in the days of ivory ball billiards, because 'drag' tended to eliminate that liability to error in running inseparable from even the best ivory balls. Now that crystalates have superseded ivory, 'drag' has lost much of its former utility, as you can depend on these balls running true without variation. But the proficiency Roberts displayed at 'drag' shots, holding his cue hard, and very hard, the moment he actually hit the ball, shows how wrong it is to dogmatize about holding your cue lightly as a general thing. Similarly, other players might be mentioned whose cue-hand automatically clenches on the cue-butt when they play a forcer or any other stroke calling for power of cue. The material action is so quick that it is extremely hard to detect. Very possibly the cue is held delicately when the stroke is beginning. But as cue-tip strikes ball the hand stiffens. Therefore the striker is holding his cue firmly as he actually plays the shot.

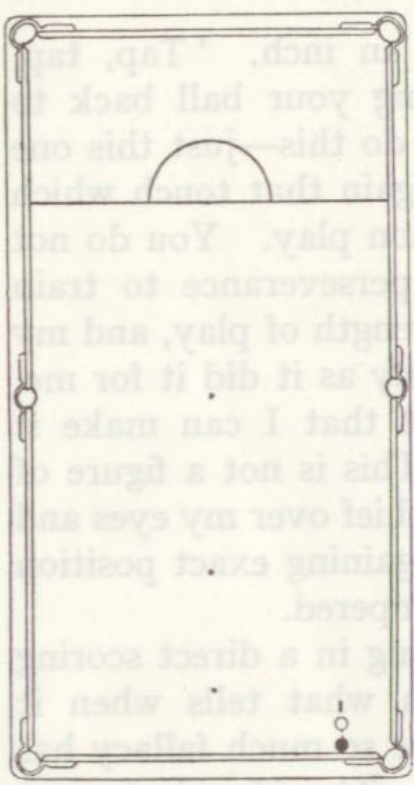
What you have to study in cue-delivery takes place during the infinitesimal flash of time when your cue-tip is doing its work on the ball you are playing. Cue-hold is preliminary to this, and always subordinate to it. Never waste time on preliminaries which amount to nothing when cue and ball meet. Cut out that slithering of the cue backwards and forwards as if you cannot make up your mind where you mean to hit your ball. This unsettles and unsights you, and the less you do it the better. Never waggle your cue about while delivering it. Avoid the common up-and-down action which sends your cue forward in a series of wavy movements. This is bad, but it is even worse

to get a side waggle going, as this means that you actually hit your ball just where the last waggle may happen to end, which makes it a mere chance whether or not you hit your ball correctly. My argument is that a confident hold of the cue is of enormous assistance in helping you to avoid these pitfalls in cue-delivery. It adds weight to the stroke whenever you want it, and I advise you to scale your cue-hold to the stroke according to the natural feel of your hand. Correct mistakes as you discover them ; you will never make a billiard player unless you do that. There is so much of personality in cuemanship, so much scope for individuality, that I want you to forget all the old fetishes. Deliver your cue straight and smooth, hold it as you find best to this end ; that is enough. Before we quit this, let me warn you against too much of a good thing. Because I say you can hold your cue firmly on occasion, this does not give you licence to grasp it as you might a punt-pole. Such intensity of grip, especially if you bring the palm of the hand into it, will spoil everything. You must be reasonable in this matter of a firm cue-hold.

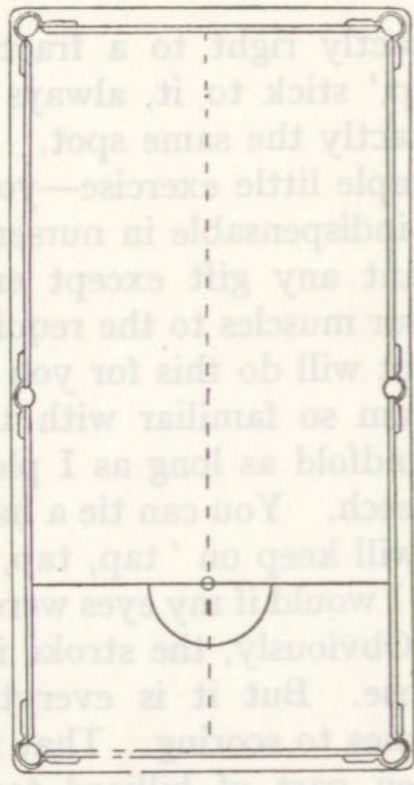
Much of the above is very unorthodox, as I well realize. And I am about to be even more unorthodox by teaching you at once the secret of a phase of billiards which is considered to be so advanced that amateurs are warned off it unless they are very exceptionally capable. I refer to nursery-cannon play, which I may claim to be the first to exploit as a match-winning force. There were close cannon adepts before my time ; I know that and admit their skill. But what they could do was personal to them ; they made close-cannon manipulation so exquisitely intricate that each man had a style of his own which was too fragile to be

either handed to another or relied on in the stress of combat. If the balls ran favourably for close-cannons, the professional adept would tap them for a while, ever fearful of a 'cover', and would open the game rather than take any positional risk. That is, apart from exhibition play. In championship billiards, for instance, close-cannons counted for so little that two champions of recent times could be named who won through without playing them. I can say without egotism that I have changed all that, making runs of close-cannons such a formidable scoring force that they hold the balance of power in billiard supremacy.

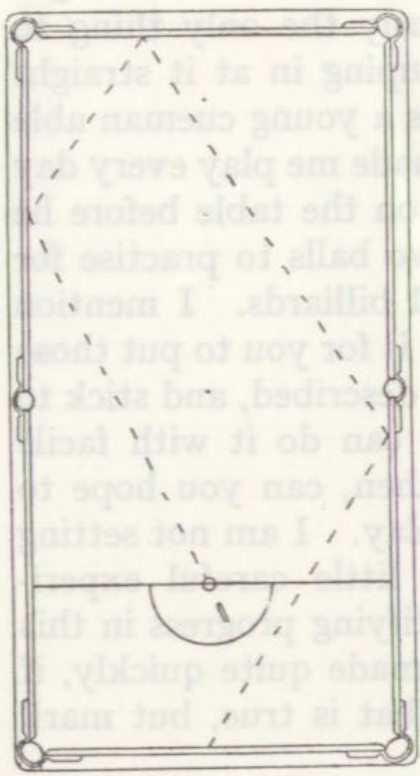
Now, I want to begin to tell you how to make nursery-cannons as useful to you as they are to me. You may not make runs of a hundred or more, but you certainly ought to be able to tap them off by the dozen, even if a fifty break is a good one for you in all-round play. Touch is the first thing you want, and the big mistake in the past has been the notion that the touch necessary for close-cannon play is a natural gift. That is not true, such touch can be cultivated on the right lines by any average amateur. Everything depends on how you set to work, and in my first diagram I show you how to make a beginning. Place a ball (I have used the red in my diagram) tight against a cushion within convenient reach of your cueing. Be careful about that; I do not want you to feel in the least uncomfortable. Place the cue-ball directly behind red as in Diagram 1, about three inches from it, and play full on red to kiss your ball back into precisely its original position. This is not a difficult thing to do once or twice, but I want you to do it with such consistent accuracy that you will be annoyed with yourself if you fail to leave your ball



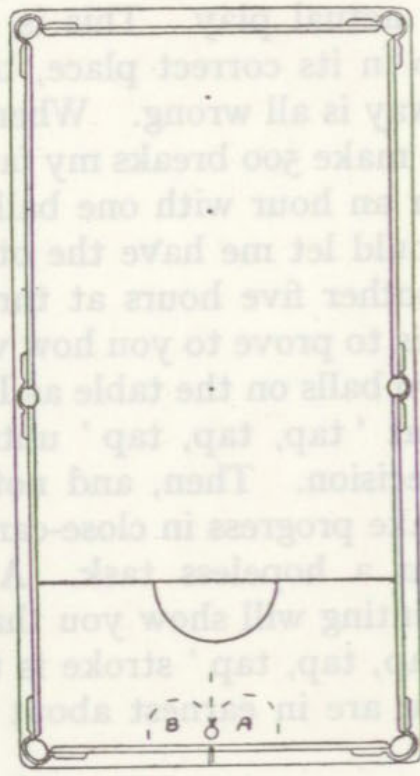
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2



3



4

exactly right to a fraction of an inch. 'Tap, tap, tap,' stick to it, always bringing your ball back to exactly the same spot. If you do this—just this one simple little exercise—you will gain that touch which is indispensable in nursery-cannon play. You do not want any gift except enough perseverance to train your muscles to the required strength of play, and my shot will do this for you as surely as it did it for me. I am so familiar with the shot that I can make it blindfold as long as I please. This is not a figure of speech. You can tie a handkerchief over my eyes and I will keep on 'tap, tap, tap', gaining exact position as I would if my eyes were unhampered.

Obviously, the stroke is nothing in a direct scoring sense. But it is everything in what tells when it comes to scoring. That is where so much fallacy has been part of billiard teaching. The idea is to put up a shot and teach the pupil to make it as he might in actual play. This is obviously the only thing to do in its correct place, but jumping in at it straight away is all wrong. When I was a young cueman able to make 500 breaks my father made me play every day for an hour with one ball only on the table before he would let me have the other two balls to practise for another five hours at three-ball billiards. I mention this to prove to you how vital it is for you to put those two balls on the table as I have described, and stick to that 'tap, tap, tap' until you can do it with facile precision. Then, and not till then, can you hope to make progress in close-cannon play. I am not setting you a hopeless task. A very little careful experimenting will show you that gratifying progress in this 'tap, tap, tap' stroke is to be made quite quickly, if you are in earnest about it. That is true, but mark

this, the better you play the shot we are discussing the more you will excel at the nursery cannons I shall tell you about later on.

For the present I will leave you to 'tap, tap, tap', and end this chapter with a note about what I suppose is your left hand, although it happens to be my right. I refer, of course, to your 'bridge' hand, over which your cue slides. As I am a left-handed player, this is my right hand, and is so photographed on Plate II. The first of these photos shows you how to learn to make a perfect 'bridge'. Begin by folding the third and fourth fingers beneath the palm of your hand as in the first photo, and place your hand on the table as there shown. You cannot do this simple thing without throwing the ball of your thumb into the right position for your 'bridge'. It may feel strange to you at first, which proves that you have been making a faulty bridge. When you get used to the 'feel' of the ball of your thumb on the table where it ought to be, then proceed to spread the other two fingers as shown. Do not be in any great hurry about this. You can play well enough for a spell with the 'two-finger' bridge as illustrated, and pass on to the finished 'bridge' when you are sure that the ball of your thumb has a habit of dropping into the right place. It is the foundation of your 'bridge'. Get it right, and you can scarcely go wrong, except that you do not want to place your fingers too wide apart or cramp them too close together.

Always avoid extremes in your billiards. You must have a firm bridge, and will get it if you work on from my two-finger hint, a simple thing, like the 'tap, tap, tap'. Billiards is made up of simple things done to perfection. Amateurs complicate their game to an

extent it disquiets me to think about. They can never hope to play really well like that. There will be more simple things in my next chapter, and so on to the finish. When I begin to theorize abstrusely, I shall be doing something I have never done before. That may be the main reason why I make four-figure breaks fairly frequently.



### CHAPTER III

#### HOW TO HIT YOUR BALL

**B**EFORE you hit your ball you must look at it. But you do not keep your eye on the cue-ball when making your shot. Having decided on the line of your stroke, fix your eye on the object-ball as your cue swings into movement and you are committed to decisive action. I always do, my father did, and his father did. This is no family habit, as I have never seen any professional exponent keep his eye on the cue-ball when playing his shot. The whole idea appeals to me as fantastic, and there I will leave it.

By all means get down to your shot as much as possible. Plate No. 3 shows how I conform to the modern rule, which demands that the eyes shall be as nearly as possible on the level of the balls when sighting your shot. This sighting method gives you the best possible view of the balls. I am also of opinion that it tends to eliminate the fault of moving on the shot, a bad habit which is sure to unsight you. But if you get your head well down, then it will need conscious effort to move as the shot is made. With the upright stance, an unconscious head movement at the critical moment when the cue is swinging forward is always likely to occur.

As you address your ball, before hitting it, make sure you feel comfortable and perfectly at ease. Bend your knees a little, both knees if you like. I am no believer in the rear leg stiff and straight and the front

knee bent. Make yourself at home at the billiard-table. The moment you feel strange and awkward you are handicapping yourself, perhaps for the whole of your billiard playing. I have told you how to make your bridge and hold your cue. Now, stand steadily and comfortably, and begin with one ball only, please ; the spot will be best for training purposes.

Place that ball as in Diagram 2, and play the familiar up-and-down shot over the line of spots facing you. Hit your ball in the middle ; it will help if you arrange the spot on the ball to assist with this at first. But do not keep your eye on that spot. By noticing it before you play you convey a mental picture to the brain-cells which direct your cue-arm, which helps you along until accurate ball-striking becomes subconscious. Play the steady old shot in Diagram 2 until you can be reasonably certain of bringing your ball back in a direct line off the top cushion, thus proving the truth of your ball striking and cue-delivery.

I do not want you to work and worry until you can bring that ball back dead straight every time. If you get a fair average of straight returns, and your returns off the line are not more than the width of a ball on the wrong side of the ideal, that will do well enough for practical purposes. But if you find that some of your returns are a foot out, or even half that, take warning : there is something amiss with your cueing which must be set right. You are trying to hit your ball in the middle, and hitting it somewhere else—that will not do.

Think for a moment. What are you doing wrong ? Probably this : you are holding your cue too far from your body, thus creating side waggle. Keep your cue

as close to your side as you can without straining ; remember that it should slide under the centre of your face for the shot before us. This cannot be done if you hold it away from your body with elbow stuck out. Keep the elbow of your cue-arm directly above your cue, and as your cue swings home on the ball, it does not matter if the butt swishes the side of your waistcoat.

It is tiring work sticking to that one-ball shot in Diagram 2. And I do not want to tire you any more than can be avoided. Therefore, when this shot gives results showing that you are hitting your ball fairly well, allow yourself a recreative change by having a spell of practice at the useful one-ball stroke shown in Diagram 3. You place your ball on the centre-spot of the baulk-line, and play round the table as indicated by the dotted line in the diagram. If you play the shot correctly your ball will arrive at the centre of the baulk-cushion, or very near it. When you play this well enough to be confident about doing it, move your ball two or three inches to the right. Aim at the same spot on the side cushion ; play exactly as you did before.

The result will be different. On account of the fresh spotting of your ball on the baulk-line it should finish two or three inches to the right of the centre of the baulk-line. Having satisfied yourself about this, move your ball farther still to the right, when the finish of its run round the table will bring it farther to the right on the baulk-cushion. Continue in this way until you reach the right-hand spot of the ' D '. Then return to the centre-spot and work away to the left on the same principle. This will return your ball to the left of the centre of baulk-cushion, and by the

time you have reached the left spot of the 'D' you will know how to bring your ball round to make it hit an appreciable sector of the baulk-cushion.

This will teach you a great deal about accurate ball-striking—the primary lesson. If your ball hits the correct spot on the side cushion, and comes round in such erratic style that it hits the baulk-cushion wide of its intended target, then you may be sure you are imparting unintentional side. Correct this by taking great care to hit your ball truly at your next attempt. This is very important. We all make bad shots sometimes, and if we learn the lesson a bad shot teaches us, we are making splendid headway. You cannot take this lesson too soon, which explains why I want you to be careful to make each shot correctly after a poor attempt. Better still, determine to make three good shots in succession after one you are not pleased with. This is a severe test, but it marks the true road to perfection.

Our shot in Diagram 3 teaches two things—accurate ball-striking first and foremost, and also a useful knowledge of how to tackle double-baulks. When you get a reliable grasp of what can be done by always aiming at the same spot on the side cushion and moving your ball along the baulk-line as I have described, you will know for certain how to make your ball hit a given spot on the baulk-cushion. The utility of this in tackling double-baulks is too obvious to need stressing.

Not wishing to bore you, to make you tired to death of the vitally important one-ball practice, I will teach you the masse shot to vary your practice. Most people think this shot far too advanced for average amateurs. This is as big a delusion as the one I have

already exploded concerning nursery-cannons. Anybody can play the masse shot if they are taught properly. This is the way to do it. Place your ball a little clear of the baulk-cushion, as in Diagram 4. Do not try this shot anywhere else, as practising it is best restricted to a part of the table which gets very little play on it.

Make sure your cue-tip is not shiny, and chalk it with a light touch, using really good chalk. Then shape at the shot as you see me doing in my photo of the masse stance (see frontispiece). Notice how the cue is held and the formation of the 'bridge'. Study these two points with all the concentration you can. Remember that you must have such facile command of your cue that the downward delivery is pliable and under perfect control. Also, your bridge must be firm enough to ensure accurate delivery of the cue-tip on the part of the ball you want to hit. I have had a special photograph (Plate VII) taken to illustrate this. It shows from above the ball I am actually playing at in my stance photograph, and demonstrates exactly how my cue strikes it.

The above explains what I do when playing for a masse effect to the right, the loop marked 'A' in diagram, and purposely exaggerated to make the general idea clear. Hit your ball as much to the left, and you get the curve marked 'B' in diagram. Stand straight behind, and hit your ball the same distance behind its centre, and you will cause it to spin forward and return as indicated by the straight line in the diagram. Thus you get right, left, and front masse effects, all from the same spot and with but one ball on the table. Do not think of putting another ball up until you can curl your

ball at will right or left, and make it run on and come back.

At first this will be a terrible business. It may take you quite a long time before you begin to notice any appreciable ball movement in the direction you desire. Stick to it for a while, and then have a spell at the 'steady one' shown in Diagram 2. Pass to the all-round shot in Diagram 3, and then return to the problem presented in Diagram 4. Like this, your one-ball practice will become humanized instead of mechanical. You have three points of interest to engage your attention and keep you from feeling the dull strain of monotony. Despite this, I must tell you that one-ball practice is sure to be tiresome to an extent which cannot be avoided. Then, when that tired feeling comes, you must decide how well you mean to play billiards.

If you are content with an occasional break of twenty or thirty, just try my one-ball shots as a matter of curiosity and forget all about them. But if you make fifty breaks and wish to become a hundred-break amateur, then the more of this one-ball practice you put in the quicker you will make three-figure breaks and plenty of them. Should you make hundred breaks, these shots will clear the way towards two-hundred breaks. Practise them consistently, with the 'tap, tap, tap' shot to keep your touch in trim for nursery cannons, and there will be no finality to your billiard improvement.

The underlying reason why so many amateurs reach a certain stage and never play any better is because they are stopped by a fault in the mechanics of their game which ordinary play can never eradicate. Such a fault cannot possibly escape detection if you weld

my practice shots into your regular routine. If you are hitting your ball badly without knowing it after a few true shots, my Diagrams 2 and 3 will tell you what is the matter in ten minutes. The 'tap, tap, tap' shot will test your touch, with the masse diagram to keep you informed of how you are playing this clever shot.

As you test your billiards in this way, you not only detect faults, but also remove them, as the practice you are getting is the only remedy. I am most anxious that amateurs of all degrees of proficiency should not regard the shots I have given as merely preliminary, as something to be tried out and discarded when you get going with three-ball billiards. That is as big a mistake as it is possible to make. If you can manage to never let a day pass without a serious spell at these shots, even if only for a few minutes, the result will astonish you as time goes on.

Do not forget that time counts for everything. If you think you can make the shots under discussion during a single half hour or so you are very much mistaken. But you can make them if you allow yourself time for consistent practice at every opportunity. The effect of this will be cumulative; you will improve as you go on, and what you learn will not leave you.

## CHAPTER IV

### PROGRESSIVE PLAY

**Y**OU must not expect this chapter on 'Progressive Play' to take you at once into break-building. That will come in due course; just now I wish you to realize that you cannot make breaks unless your stroke play is as it should be, and your stroke play can never be good enough for the making of breaks unless you are very thorough with much that is generally either left out or given scant notice. Bearing this in mind, I want to take you from the strokes I have described to others dealing with fresh ball-movements.

Diagram 5 presents a deceptive shot. You place red as shown in line with the middle pocket, strike your ball high, and play for the six-shot from the position on the baulk-line. This looks a great deal easier than it is if played as I want you to do it. The whole intention of this shot is to teach you to strike your ball with 'top' in accurate style. It is an exercise shot pure and simple, as it would never be the game to play such a shot against an opponent. Now, if you dodge the exercise the shot will fail to help you. By this I mean that if you play a sluggish full-ball shot on red which just takes your ball through to the pocket, then you are missing your lesson. I want you to put that red down with decision, and send your ball into the pocket after it in brisk fashion.

You can only do this by playing freely and high on your ball with such accuracy that the red is pocketed,



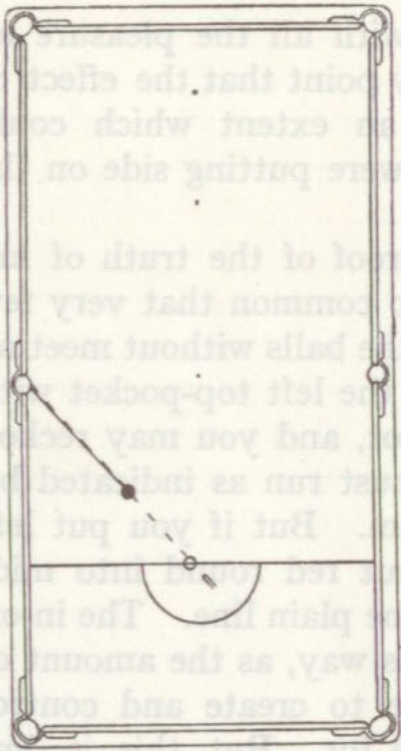
while your ball, struck high enough to impart unmistakable 'top', travels straight into the pocket after the red. Played in this way the shot in Diagram 5 becomes an exacting test of truth and virility of cue-delivery. If you can make it as often as you miss it, even after a deal of practice, you are entitled to be pleased with yourself. This is due to the extreme difficulty you always have to contend with when endeavouring to hit your ball high and centrally; which means, obviously, that you must not impart unintentional side, a mistake which needs a deal of avoiding as your cue-tip swings at the top of your ball. But it must be avoided, as unintentional side in top-stroke play is doubly disastrous. It sets up swerve action which tells before the object-ball is struck, and turns your ball after contact in an unexpected way.

There is so much in this that if you are doing very badly indeed with Diagram 5 you may be almost certain that unintentional side is at the bottom of your trouble. The remedy is to take a spell at the shots in Diagrams 2 and 3, the latter for preference, as it is the more freely played of the two. This will restore truth to your cueing, and enable you to shape at the shot in Diagram 5 with more of that confidence which means so much. I want you to note how I refer you from one shot to another for training purposes. This instils the linked nature of my teaching, a fact I cannot stress too strongly. You must make up your mind to keep trying backwards and forwards if you mean to get on. The moment you say 'I know all about that,' you begin your fall away from progress—in a practical sense, I mean. In theory, I hope I have not put anything on paper likely to puzzle a child. But when you get your cue in your hand and face my

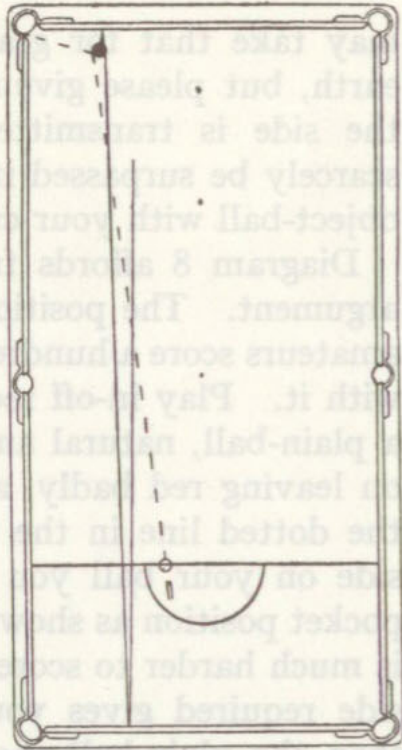
training shots, you know just as much about them as you can do. If you think this out it will bring you to know thyself in a billiard sense.

Billiards, I would have you know, is stark realism to me. I am ruthless in cutting out everything which has no direct playing application. That is why I fail to see anything at all, except mere waste of words, in the everlasting discussion about transmitted side. Quite a big book could be filled with what has been written for and against the possibility of transmitting side from the cue-ball to the object-ball, but I have yet to meet a man who can play any better for all this spilling of ink. It does not matter to me in the slightest whether, as a scientific fact, it is or is not possible to transmit lateral movement from the cue-ball to the object-ball. You can say what you like about it, and I will agree with you; that is how supremely indifferent I am to the technical argument.

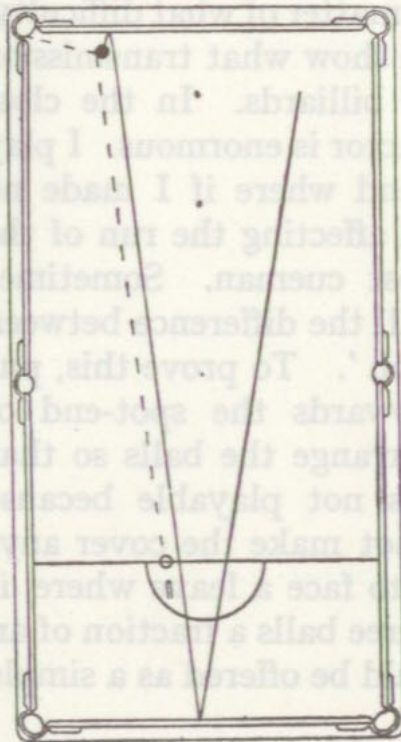
But get away from theory, put the balls on the table, and I will prove to you that the influence of side on the cue-ball is transmitted to the object-ball to such an extent that you cannot play billiards without allowing for it. Forget all about transmission of side; call it transmission of side effect, and you get my idea exactly. What this amounts to in practical play is shown in Diagram 6. Here, if I put right-hand side on my ball, I score the in-off red and bring the object-ball back over the continuous line. Playing from the same spot in baulk, but using left side, I bring the red back towards the opposite side of the table, as in Diagram 7. It is annoyingly futile to argue that this is not due to transmitted side, but to the influence of side on the course of my ball both before and after contact with the object-ball. You



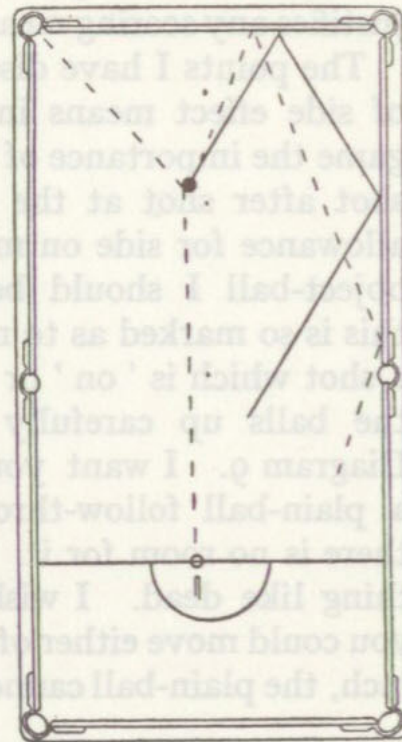
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may take that for granted with all the pleasure on earth, but please give me my point that the effect of the side is transmitted to an extent which could scarcely be surpassed if you were putting side on the object-ball with your cue.

Diagram 8 affords fresh proof of the truth of my argument. The position is so common that very few amateurs score a hundred off the balls without meeting with it. Play in-off red into the left top-pocket with a plain-ball, natural angle shot, and you may reckon on leaving red badly, as it must run as indicated by the dotted line in the diagram. But if you put left side on your ball you will cut red round into mid-pocket position as shown by the plain line. The in-off is much harder to score in this way, as the amount of side required gives you more to create and control than the plain-ball shot calls for. But this is immaterial; it always is. The perfect positional end justifies any scoring means, no matter of what difficulty.

The points I have discussed show what transmission of side effect means in open billiards. In the close game the importance of this factor is enormous. I play shot after shot at the spot-end where if I made no allowance for side on my ball affecting the run of the object-ball I should be a lost cueman. Sometimes this is so marked as to make all the difference between a shot which is 'on' or not 'on'. To prove this, put the balls up carefully as towards the spot-end of Diagram 9. I want you to arrange the balls so that a plain-ball follow-through is not playable because there is no room for it. Do not make the cover anything like dead. I wish you to face a leave where, if you could move either of the three balls a fraction of an inch, the plain-ball cannon would be offered as a simple

run-through. But, in the actual shot before us it is not quite there. No plain-ball shot can avert that little kiss which is sure to spoil the cannon. Now, if you put strong right-hand side on your ball, and play to send the first ball past the second as near as you can without disturbing it, the cannon is a certainty.

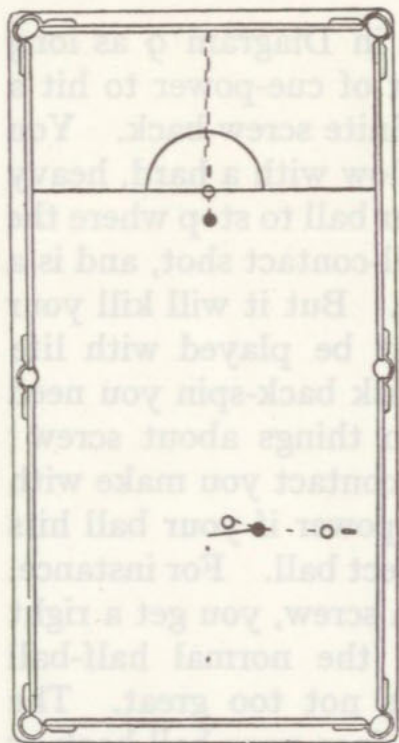
But not if you play direct against the nap of a woollen cloth. Then the normal effect of side is reversed unless you play at such strength that the speed of your ball prevents it from turning. This introduces a factor of such baffling intricacy that I do not suppose I employ side directly against the nap of the cloth once in a week's play. All the ball-control I can command is directed against leaving such a shot. Should one be left for me by an opponent, I do all I can to extemporize a shot without side which will compel an opening score. And I am advising you to do the same thing. Life is short, and you can only devote a certain amount of it to your billiards. There is so much before you which is straight and clear, and which will make a full call on every moment you can spare for billiards, that I do not advise you to worry a lot about the complexities of an occasional leave against the nap. If you allow that your ball must curl away in the reverse direction of the side it carries directly against the nap, and that the slower the shot the more pronounced the curl will be, especially just before your ball stops, then you have done all you can see through.

Concerning the imparting of screw, a great deal of perfectly needless mystery has been wrapped round the shot. Plate No. 4 shows me facing the screw-stroke dealt with in Diagram 9. Notice how firmly I hold my cue, and how I arrange my bridge so that

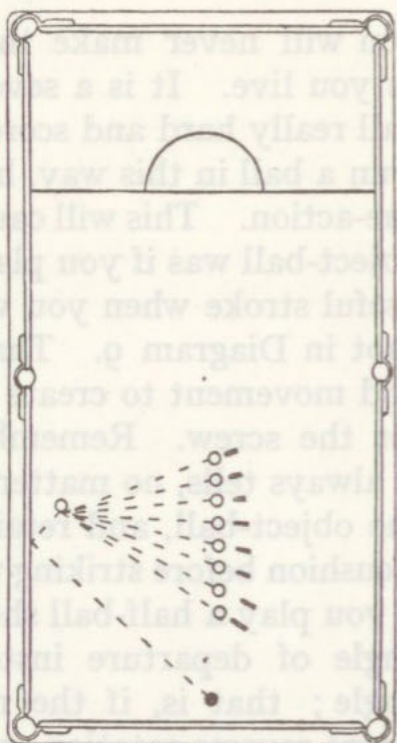
the cue slides through a loop formed by my forefinger. The firm cue-hold abolishes that old tradition, so bothersome to beginners, about gripping your cue the moment your ball is struck for screw-shot play. Forget all about this ; hold your cue as I do mine, arrange your ' bridge ' after my pattern, chalk your cue, strike your ball low and confidently, and you will soon begin to get screw-back effects, even if you never did so before. If you make the ball jump while practising, you are striking it too low. If it goes forward and stops dead after contact, this shows you are stabbing the shot for certain, and you may be striking rather too high for pure screw in addition. To correct this elementary fault, make sure that your cue gets hold of the ball. You have to make your ball run forward with backward spin on it, and you cannot do this unless your cue goes through far enough to create rotary movement in addition to the plain forward impulse. Remember this : hit your ball low enough, and we can go ahead together as in Diagram 9.

Here you have the cue-ball on the centre-spot of the baulk-line, with the object ball a few inches in front of it. I want you to screw back straight into baulk, make your ball hit the baulk cushion and rebound to the spot you played from. A beginner will not get anywhere near this for quite a long time. Even a capable amateur may be surprised at what he has to do to pass this test. I dare say that plenty of my readers will screw-back to the cushion without much trouble. But that is the easy half of the task. Getting the rebound is much more troublesome, as the direct impact on the cushion takes so much pace out of your ball.

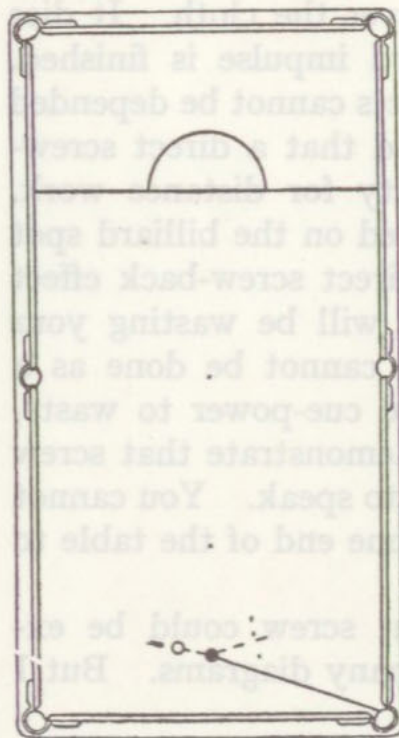
If you try to overcome this by sheer hard hitting



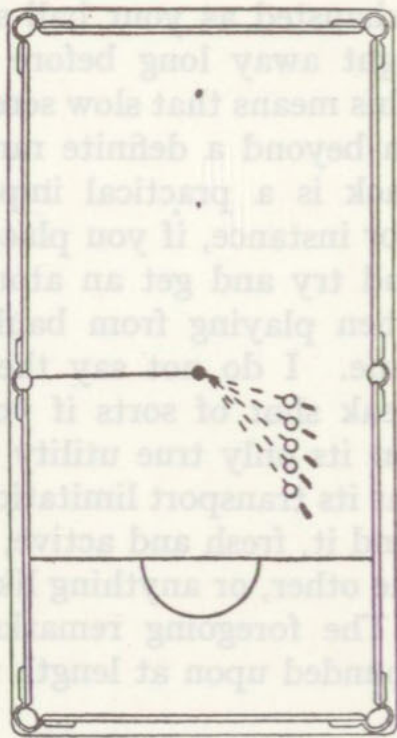
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11



12

you will never make the shot in Diagram 9 as long as you live. It is a severe test of cue-power to hit a ball really hard and score a definite screw-back. You stun a ball in this way, hitting low with a hard, heavy cue-action. This will cause your ball to stop where the object-ball was if you play a full-contact shot, and is a useful stroke when you want it. But it will kill your shot in Diagram 9. That must be played with life and movement to create the brisk back-spin you need for the screw. Remember two things about screw: it always tells, no matter what contact you make with the object-ball, and retains its power if your ball hits a cushion before striking the object ball. For instance, if you play a half-ball shot with screw, you get a right angle of departure instead of the normal half-ball angle; that is, if the range is not too great. The latent reverse rotation, which brings your ball back or causes it to take any screw angle after contact, is soon exhausted as your ball spins over the cloth. It dies right away long before forward impulse is finished. This means that slow screw effects cannot be depended on beyond a definite range, and that a direct screw-back is a practical impossibility for distance work. For instance, if you place the red on the billiard spot and try and get an atom of direct screw-back effect when playing from baulk you will be wasting your time. I do not say the thing cannot be done as a freak shot of sorts if you have cue-power to waste, but its only true utility is to demonstrate that screw has its transport limitations, so to speak. You cannot send it, fresh and active, from one end of the table to the other, or anything like it.

The foregoing remarks about screw could be expounded upon at length with many diagrams. But I



do not want to weary you with this. If you work away at Diagram 9, all the rest will come to you as you play your ordinary game. But if you have no playing command of what Stroke 9 teaches, all your theoretical knowledge of the properties of screw will help you no more than eloquence on the theory of finance will impress your bank manager 'in re the matter' of an overdraft.

## CHAPTER V

### INVESTMENT AND OTHER SHOTS

**D**IAGRAM 10 completes what I call my 'investment' shots. They represent something in reserve you can always fall back on. Plain-ball striking, screw shots, masse effects, whatever you may be wanting to improve, make your selection from the shots I have shown you. To complete the list Diagram 10 displays a range of shots that serve a double purpose. Place the red near the top cushion where shown, with white facing your ball as in centre stroke in the diagram. Play the one-cushion cannon without side, a simple shot, but do not be pleased with it until you leave the red nicely on completing the cannon. Keep the same positional ideal in mind as you busy yourself with the other cannons indicated in Diagram 10.

Arrange these for yourself by moving your ball by degrees to the right and left, leaving the position of white and red unchanged. As you move your ball to the left you will naturally need left side to score your cannon. Plain-ball striking will suffice at first when you move your ball over to the right, but before you have progressed very far you will find that right-hand side is wanted as well as a very thin ball-to-ball contact. As you approach the limit in this direction it requires a very good shot indeed to score the cannon. As you play these shots you are learning how to impart side, and the effect side has on your ball after contact with a cushion.

You will notice I have not said anything about check

or running side. I have no intention of doing so, as the terms are ambiguous, and 'right-hand' or 'left' says exactly what I mean without the possibility of a mistake. There is this general thing about side which you must bear in mind. When you apply it to your ball your cue is no longer pointing through the centre of your ball to the part of the ball aimed at. This is more troublesome when potting a ball than in connexion with other shots, simply because the margin of permissible error in ball-to-ball contact is negligible in winning hazard play.

Concerning potting a ball, remember this—there is no mechanical or theoretical guide worth my telling you about. All sorts of ideas have been submitted to me as sure to improve a man's potting, but the only thing I believe in is so much practice on the right lines that potting a ball comes natural to you. It is a matter of seeing with a knowing eye the object-ball and the pocket, and connecting the two by means of a cue-arm trained for the job. There is nothing better than the old spot-stroke for such training. W. J. Peall, our esteemed veteran of the cue, did much for billiards when he perfected spot-stroke play before I was born. I never make a break without being in his debt, because I am constantly using shots in my top-of-the-table play which he exploited so well in his spot-stroke breaks. Wonderful breaks they were, too, and I am decidedly of opinion that the elder Peall has never had full credit for them. People think he kept playing the same shot over and over again. Did he? Put the balls up and see how far you can go in that direction. I prefer to say that, freak records excepted, old Peall shares with me the honour of scoring a break passing the third thousand.

Diagram 11 shows the balls in typical spot-stroke position. Play the shot to the best of your ability, when you will soon find that your ball is left out of good line for the spot-hazard. You will get a variety of positions as indicated roughly by the dots on the table facing your ball and beyond the spot. Pot the red from these positions as they occur, and you will improve your bad shots over and over again until they become your good ones. There is no other way. If you find that you always seem to miss the pocket when your ball stops on one of those spots indicated in Diagram 11, then you have made a most valuable discovery. Note the spot carefully, and work away at putting red down from it until you feel as if you could not miss the shot if you tried. Do not give up. Let me tell you this, that I-may-as-well-give-it-up feeling always creeps in when your practice is really beginning to do you good. Presently the subconscious effect of your practice will assert itself, and the shot you dreaded is at your disposal for ever after. You can never tell when this transformation will take place, but I have seen it come so often after a particularly bad spell that I have said to my pupil, 'The worse you play the better you are getting on.' That seems hopelessly contradictory, but it is a truism of billiard coaching. The trouble is to induce a man to hang on grimly until his bad time has passed, until he has eliminated his error by the attrition of application, and proficiency comes as his assured reward.

To vary your spot-stroke practice, put the balls up as in Diagram 12, and play to put the red in the middle pocket, beginning with the straight pot, and moving your ball approximately as in the diagram, to present a series of cuts of progressive fineness. This will bring

you at last to the thinnest possible contact you can make to pot a ball, but before you reach this point you will have learned all kinds of contacts of consistent playing value. Do not skim over these shots in a casual manner, making some and missing others as if you were merely killing time. The lack of an opponent tends to encourage such slackness, but ought not to do so, as you have to beat yourself, the only opponent that stands between you and your desire to excel. In billiards, above all active games, you have to eliminate the primitive within. At cricket or golf you school the aboriginal swing of a club. At boxing there is much of 'nature red in tooth and claw', perfected and polished by science and training. But billiard playing is altogether foreign to any set of movements you can hope to inherit from the remotest of your ancestors. It is a refinement of civilized man in its every aspect, and you have to school yourself against yourself to overcome any tendency to the primitive to sway you away from your determination to become a capable cueman.

It is quite a good idea to vary the distance of the strokes presented in Diagram 12. Bring your ball farther back at times without changing the angle. This will teach you distance work to an extent, but Diagram 13 shows the special training shot for this. Place the red approximately in line with the top pocket as shown, and play from hand to pot it and leave spot-end position as favoured by the lie of white near the top cushion. This is a most useful practice shot, but it is advisable to get a friend to stand at the spot-end and save you the continual walk round the table to arrange the balls—a tiring job. This suggests the possibility of joint practice. Well, I can imagine

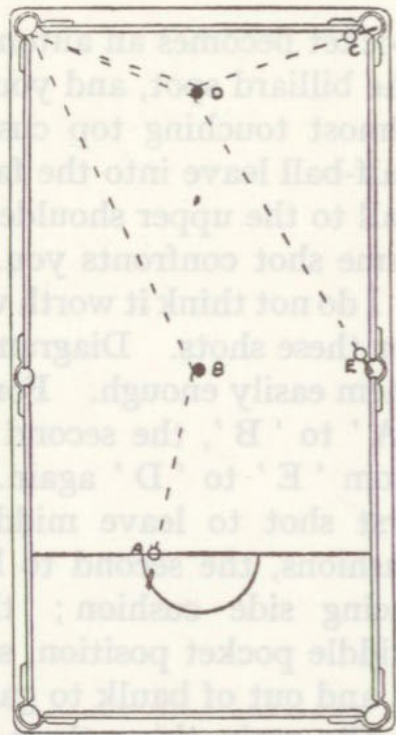
two stern, dour, and most resolute men doing it with success, taking my shots right through in turn, and working away in stony silence which might even be emulative and helpful. But the average pair of friends, human nature being what it is, would itch for a game long before mutual practice in turn lasted long enough to matter much. They will doubtless enjoy their game, and I do not begrudge them their sport, but they will finish as far as ever from real billiard improvement.

I now propose to take you a step farther by asking you to earn position instead of setting it up by hand for practice purposes. This is a big step in advance ; there is much in it which has never been fully explained. To see my point, place the red anywhere you please where it offers a reasonable sort of pot into the middle pocket, and play to put it down and leave position for the spot-stroke. You will soon learn that it is easier to do this via the top cushion than it is by playing at dead strength to do it direct. When you gain position for the spot, carry on with spot-stroke practice as in Diagram II. You will value the position much more, and be more painstaking in exploiting it, after you have earned it as now described instead of just spotting the ball by hand to find it ready-made.

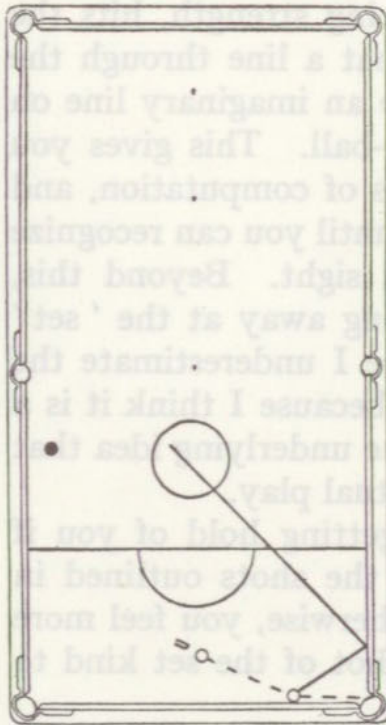
But the greatest use of this position-finding practice lies in its limitless range of application. For example, I am about to apply it to the half-ball shot, the one set shot you are told to practise by the hour from clearly defined positions. There are three of these—here they are. Place the red on the centre-spot, cue-ball a little under eight inches to the left of the centre-spot of the baulk-line ; hit your ball true a shade above its centre, and the half-ball loser into the left-hand top



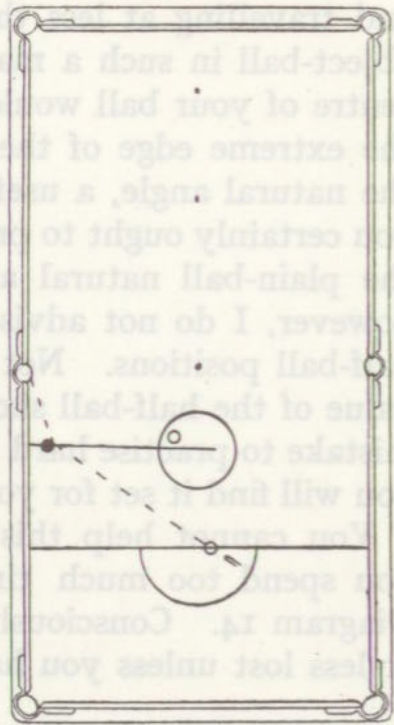
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15



16

pocket becomes an automatic certainty. Place red on the billiard spot, and your ball near either top pocket, almost touching top cushion, and you have another half-ball leave into the facing top pocket. Move your ball to the upper shoulder of a middle pocket, and the same shot confronts you.

I do not think it worth while giving separate diagrams for these shots. Diagram 14 will enable you to track them easily enough. For the first shot, you play from 'A' to 'B', the second from 'C' to 'D', the third from 'E' to 'D' again. Positionally, you play the first shot to leave middle pocket position off three cushions, the second to leave similar position off the facing side cushion; the third should also leave middle pocket position, sometimes by sending the red in and out of baulk to gain it.

The main thing these set half-ball positions teach you is what happens when your ball, carrying no side, and travelling at less than forcing strength, hits the object-ball in such a manner that a line through the centre of your ball would strike an imaginary line on the extreme edge of the object-ball. This gives you the natural angle, a useful basis of computation, and you certainly ought to practise until you can recognize the plain-ball natural angle at sight. Beyond this, however, I do not advise flogging away at the 'set' half-ball positions. Not because I underestimate the value of the half-ball shot, but because I think it is a mistake to practise hard with the underlying idea that you will find it set for you in actual play.

You cannot help this idea getting hold of you if you spend too much time on the shots outlined in Diagram 14. Consciously or otherwise, you feel more or less lost unless you have a shot of the set kind to



start from, or can see your way clear to set position after a very simple opening shot. I want you to make your half-ball positions ; not get them by putting the balls just right for them by hand. I propose to begin a new chapter by dealing with this point.

**B**Y earning your position you will learn to do as practice what you are compelled to do in actual play. When you have the table to yourself, it is all very well to arrange the balls mightily convenient for the opening of a break. That enables you to get going comfortably and score as many as you can until you tumble into trouble and end your run. Then you commence again from the same set leave. Thus, in time, you begin to take such leaves as the sort of thing you expect, but are truly disillusioned on the point when you are pitted against a skilful and resolute opponent, who may have more than a little knowledge of safety play, and so arrange matters that he will beat you badly before one of your favourite leaves is presented for you to begin with.

Therefore keep your set stroke play to those investment shots. It will do you good to play them over and over again as part of your systematic training, and as a continuous part of it. But when you come to three-ball billiards and the building of breaks, then I want you to earn your openings. Diagram 15 sets you going in this progressive direction. It is not much of a leave at first sight. Your ball and white are in bank, white being tight against the bottom cushion. Red is not very invitingly situated below the middle pocket as in the diagram. Now, before we go any farther, I want to introduce my 'magic circle' (Plate V).

This is indicated by the circle in Diagram 15.

## CHAPTER VI

### HOW TO EARN POSITION

**B**Y earning your positions you will learn to do at practice what you are compelled to do in actual play. When you have the table to yourself, it is all very well to arrange the balls mightily convenient for the opening of a break. That enables you to get going comfortably and score as many as you can until you tumble into trouble and end your run. Then you commence again from the same set leave. Thus, in time, you begin to take such leaves as the sort of thing you expect, but are rudely disillusioned on the point when you are pitted against a skilful and resolute opponent, who may have more than a little knowledge of safety play, and so arrange matters that he will beat you badly before one of your favourite leaves is presented for you to begin with.

Therefore keep your set stroke play to those investment shots. It will do you good to play them over and over again as part of your systematic training, and as a continuous part of it. But when you come to three-ball billiards and the building of breaks, then I want you to earn your openings. Diagram 15 sets you going in this progressive direction. It is not much of a leave at first sight. Your ball and white are in baulk, white being tight against the bottom cushion. Red is not very invitingly situated below the middle pocket as in the diagram. Now, before we go any farther, I want to introduce my 'magic circle' (Plate V).

This is indicated by the circle in Diagram 15.

Within reason, you can make this circle an elastic one. The only thing I stipulate is that a half-ball loser into a middle pocket must be presented when a ball is left in the circle, with the cue-ball in hand. Now, harking back to the ball position in Diagram 15, the leave you must earn will bring both red and white into the magic circle in the fewest strokes possible. Therefore, you run-through white to begin with, putting plenty of right-hand side on your ball, hitting white fully enough for the shot with a crisp, confident cue-delivery which ensures success. If you find this shot troubling you because your ball sticks instead of running through smoothly into the pocket, have a spell at the shot in Diagram 5; that will cure the stodgy cueing which is behind your fault.

Having completed the run-through white and left the object-ball in the circle as in Diagram 16, your next shot is to bring red there. This calls for the 'short jenny', also shown in Diagram 16. The short jenny has this peculiarity: a good player, amateur or professional, does not mind it in the least, but it is an intensely annoying shot to those who cannot get the hang of it, as they have told me many times. You need a lot of side to pull your ball into the pocket when playing a short jenny, and should strike your ball rather low when imparting this side, to make sure that it keeps perfectly straight. Play steadily but not stodgily. Correct strength will leave red as in the diagram, but such strength must not be evidenced at the expense of the indispensable side. Many players seem unable to put lively spin on a ball unless they hit it fairly hard. Your billiard progress will come to a stop here and now unless you can get out of this habit. The short jenny is such a certain cure,

if you stick to the shot until you have mastered it, that I had a good mind to include it with my 'investment' shots, and would have done so but for its frequent occurrence in a scoring sense.

By now, as Diagram 16 proves, you have earned your middle-pocket position from the leave in Diagram 15, playing two useful strokes to gain your positional objective. Very likely you have had to play many more than two strokes to leave the balls as desired. This will not do. You are engaged on a two-stroke positional problem, and must solve it before passing on to anything else. Should you run-through white and leave that ball out of the circle, the shot is no use at all. Play it again, and again, and again, until at last you leave white where it should be. Then tackle red; if you miss the short jenny, do not try that shot afresh, but replace white and begin all over again. Eventually you will score off white correctly, and follow by making the short jenny at your first attempt. But if that short jenny leaves red out of the circle, replace the balls and do it all over again from the commencement. Then at last you will get your shots and positional sequence as you need them in match play. That is clear gain; it is teaching you to play billiards—the real thing, not an imaginary game in which prolific leaves are invariably offered.

Not an easy task, I admit. It may take you hours to solve that two-stroke positional problem for the first time. Next time you will do it much more quickly, and so you will progress until you will be rather annoyed with yourself if you fail to do it every time you try. At this stage, which you should reach in months if you practise a fair amount, you can vary things by making the run-through a little more difficult,

and changing the short jenny in the same way. Do not misunderstand me as regards time. When I say months, I do not mean that you should practise what we are now discussing as a solo proposition for months on end. My precise meaning, and I want you to grasp it clearly, is that if you begin your spell of usual practice with this two-mover, you may expect to perfect it in months as the general quality of your game improves. The same principle applies to other position-earning openings I mean to show you, and in each case you will be toughened into fighting the balls, compelling them to do your will by dint of your cueing, which is altogether different from merely placing the balls temptingly to your liking.

To realize how this difference tells, we will grant that, after working hard for it, you have contrived to 'circle the balls' as in Diagram 16. How differently you regard them now after all the trouble they have given you to leave them where they are, compared with the half-careless manner in which you might look at them if you had placed them by hand. Your next stroke? Well, that brings us to the whole problem of break-planning, to the grand strategy of billiards, when contrasted with its stroke by stroke tactics. You have your ball in hand, red and white offer middle pocket in-offs, and if you begin with red and play in-off after in-off, always striving to bring red back into the circle, you will soon be well on the road to useful proficiency at red-ball billiards, a great asset in fighting billiards. But tedious play, either to watch or to practise.

Nevertheless, red-ball billiards is so important, especially to amateurs, that I advise you to take a serious interest in it without overdoing things. If

you slave at red-ball sequences until you are uncommonly good at them, there is the limit of seventy-five staring you in the face, that being the most you can score under the rule limiting consecutive hazards to twenty-five. I think you had better take your red-ball play in this style. From position in Diagram 16, after you have earned it, go ahead on the red as long as you can, playing the long loser when red runs short for middle-pocket position. Should you fail to score, better play that bad one over again, and so continue until you leave the red out of position; you may do this, of course, either before or after your bad shot. You will lose position very quickly unless you remember that every middle-pocket red loser should be played to keep the red in mid-table position; bringing it back to the circle is the right idea every time. To do this it is often necessary to play run-through losers into the middle pockets instead of a natural-angle shot. These run-throughs must never be shirked, and should be planned to send red against the top cushion for a correct return as well as making sure your ball enters the pocket. Work this sort of thing out for yourself. Keep a little 'Billiard Progress Book'. Enter in it how many strokes it took you to earn your position, then how many you scored off red before losing red-ball position.

When such position is lost, begin to operate on white with the idea of setting up cannon position to bring the red into play again without wasting a stroke. It is very bad billiards to play a run of white losers. Having scored your cannon and regained command of the red, you naturally frame your game on the leave of the moment, which I cannot even guess at, owing to the number of strokes you have played away from

my diagram. Practice on these lines will give you a working knowledge of red-ball play, of how to gain cannon position when red hazard position is lost, and will keep your billiards well balanced, preventing you from specializing over-much on one scoring method.

But, mark this, I have told you how to do what I should not play from Diagram 16. My game would be to play a white loser to leave white in the vicinity of the spot close to the top cushion. Next shot I should put red down in the middle pocket, and in a couple of strokes find myself with spot-end position as in Diagram 17. Perhaps if red were a little too far in the centre of the table for my winner I might run in-off it just once to bring it back exactly where I wanted it. This would call for a third shot, but two are generally sufficient.

Diagram 17 presents a lucrative opening at the top of the table, but I should like you to make some useful breaks, at least in practice, before you turn from the open billiards I have told you about to this new phase of the game. Frankly, unless you can earn your position and collect a break of fifty or so by open three-ball play, I think it will do you rather more harm than good if you attempt to cultivate spot-end billiards. You see, it is a case of changing things entirely. When you follow me to the head of the table gone is the enormous advantage of placing your ball where you please in the baulk-half-circle. You have to play your shots from where you leave the cue-ball after every one, a circumstance which counts heavily against you until you are skilful enough to be able to leave your ball correctly. Then, but not till then, spot-end billiards is a facile scoring medium. It is so difficult, however, to control your ball for it

that open play is better up to a point unless you are exceptionally keen on the close game. It is a very beautiful and profitable thing, is top-of-the-table-billiards. Having led you up to it, I will devote my next chapter to the subject.



## CHAPTER VII

### SPOT-END PLAY

**D**IAGRAM 17 shows a direct method of earning a leave for break-building at the top of the table, and if you trace it back to its origin in Diagram 15 you will understand something about gaining position in a few strokes, which is a constant puzzle to so many amateurs. The pot-red in the middle pocket to leave the opening in Diagram 17 is the best route to the head of the table. The drop-cannon often played to steer the balls to the top is a good enough shot in its way, but lacks the direct precision of the movement in Diagram 17.

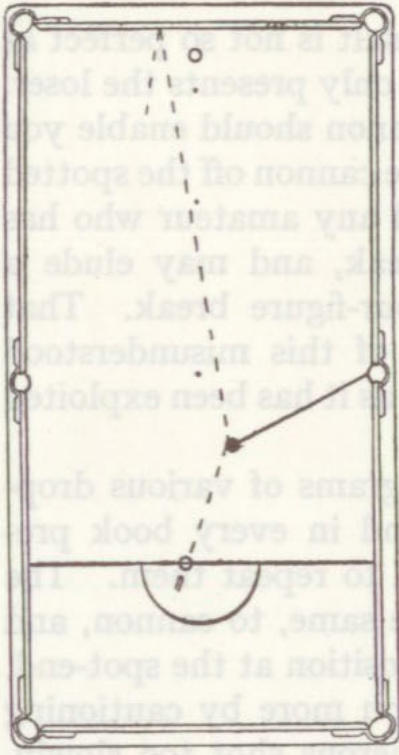
Positionally, the drop-cannon is a most deceptive shot. It is easy to score, and position so often results from it that its liability to leave you in trouble is apt to be disregarded. There is so much in this that even professional exponents are puzzled, and sometimes beaten, when a drop-cannon ends badly, often through a little kiss spoiling what would have been perfect position, sometimes because your ball stops a fraction of an inch short, or runs as much too far, and leave you a cover of some kind instead of the lucrative leave you anticipated.

You cannot avoid this sort of thing. It is inherent to drop-cannon play. Distance is the determining factor. Look at Diagram 18, which shows a typical drop-cannon played from hand in traditional style, but not altogether to my liking. Notice how far your ball has to travel before it hits the first object-ball.

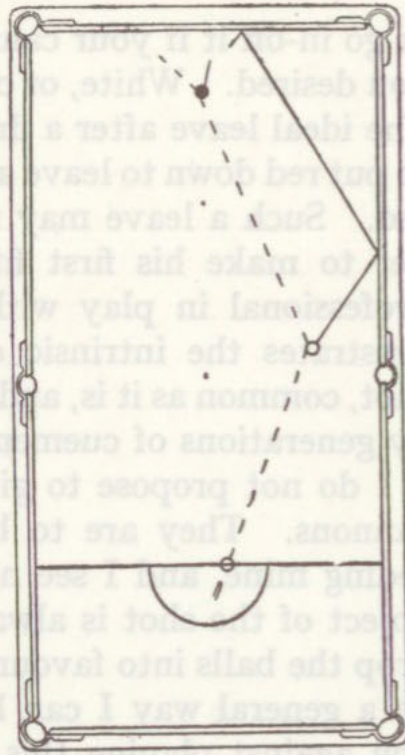
Add to this the distance of the run from the first ball to the second. Think of what it means to control your ball and the two others over the large area of table space thus presented. It can be done, of course—usually is done by the foremost players. But it is always likely to let you down for a cause beyond your control. Speaking for myself, I do not trust the drop-cannon absolutely, well knowing that it may trick me positionally at any time. That is why I much prefer the direct route in Diagram 17 to drop-cannon play for spot-end purposes.

Amateurs, I notice, seldom play the drop-cannon consistently well for position. I should say it must give even the pick of them more trouble than any other shot in the game in a positional sense, and I cannot help thinking that they rather fail to realize this. A clever amateur will sometimes approach his hundred break before loss of losing hazard position compels him to play a drop-cannon. He will commonly make from thirty to fifty points in this way. Then perhaps as often as not a drop-cannon leaves him well placed, and he continues his break pleased with the shot. . . But if he kept a record of the average of bad leaves he gets from his drop-cannons I am sure the figures would surprise him, and he will see there is enough in my point to make him chary of leaving drop-cannon position if he can avoid it.

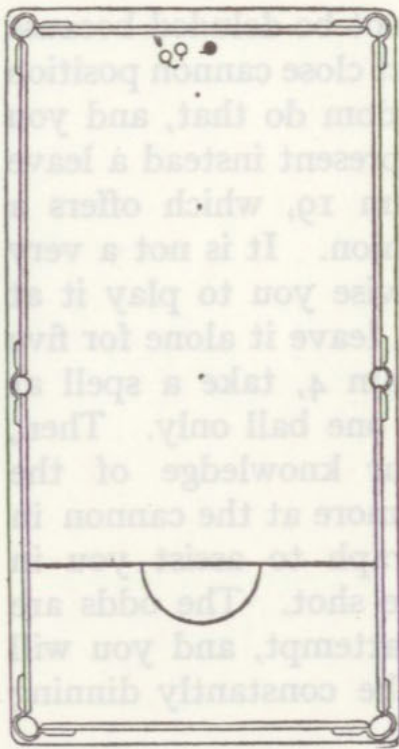
However, you cannot cut drop-cannons out of your billiards. They must and will occur at times. Then you do your best with them, but never go out of your way to leave them, to say the least of it. When playing drop-cannons, remember that the red is the ball to keep from straying at all costs. The reason is the elementary one that you can either pocket red



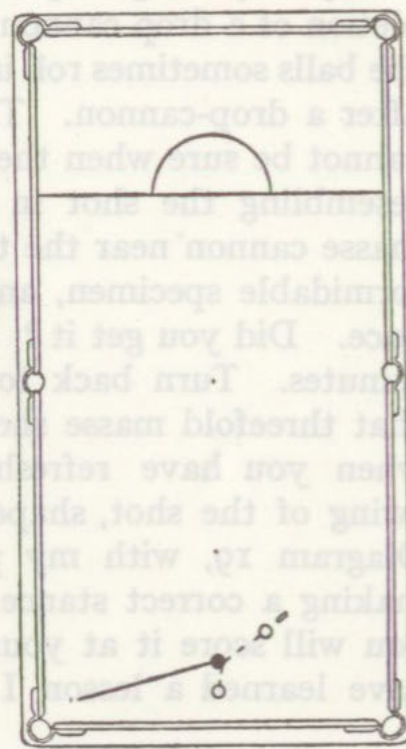
17



18



19



20

or go in-off it if your cannon result is not so perfect as you desired. White, of course, only presents the loser. The ideal leave after a drop-cannon should enable you to put red down to leave a simple cannon off the spotted red. Such a leave may reward any amateur who has yet to make his first fifty break, and may elude a professional in play with a four-figure break. That illustrates the intrinsic defect of this misunderstood shot, common as it is, and much as it has been exploited by generations of cuemen.

I do not propose to give diagrams of various drop-cannons. They are to be found in every book preceding mine, and I see no need to repeat them. The object of the shot is always the same, to cannon, and drop the balls into favourable position at the spot-end. In a general way I can help you more by cautioning you against playing this treacherous shot too slowly. Always try to give yourself table-room on the completion of a drop-cannon. Do not be deluded because the balls sometimes roll in perfect close cannon position after a drop-cannon. They seldom do that, and you cannot be sure when they will present instead a leave resembling the shot in Diagram 19, which offers a masse cannon near the top cushion. It is not a very formidable specimen, and I advise you to play it at once. Did you get it? If not, leave it alone for five minutes. Turn back to Diagram 4, take a spell at that threefold masse shot with one ball only. Then, when you have refreshed your knowledge of the swing of the shot, shape once more at the cannon in Diagram 19, with my photograph to assist you in making a correct stance for the shot. The odds are you will score it at your first attempt, and you will have learned a lesson I shall be constantly dinning

into you, which is to return to first principles when their application fails you as you play any particular stroke.

Practise in this way, and you are sure to get on very much faster and more surely than you will in any other manner. For instance, I dare say that, provided you have done a fair amount of preliminary work at No. 4 Diagram, the cannon in Diagram 19, after your initial failure, would be scored at perhaps the second or third attempt. It is a mistake to be satisfied with this. The fact that you missed the shot at first is proof that your control of the masse shot is weak. It is not responsive to the requirement of the moment. Diagram 4 will make it so, and you must never forget that this control must be complete and immediate to be of the smallest playing utility. If you could make any masse shot conceivable at your second attempt, what use would that be to you if you generally missed an easy one 'first pop'?

Diagram 20 shows a typical leave at the spot-end, virtually identical with that in No. 17. There is much in that 'virtually', as so little will change your whole outlook at the spot-end. For instance, if you get No. 20 position by the route shown in No. 17 you can never be sure to a fraction of an inch where your ball may stop. Sometimes it will be so placed that, if you wish, you can take the extra red. By this, I mean that you can put red down to begin with and leave correct cannon position. The red so taken is clear profit, but you have to be very sure that cannon position is not risked by the shot. A straight screw-back may put red down and leave your ball where it was before you struck it. Play it and see what happens. You will probably put red down and leave

your ball more or less badly, perhaps too close to red, where it may be quite out of the positional line you want. This tells you at once that your screw-shot play needs a spell at the exercise shot in Diagram 9. Take it accordingly, and notice the difference when you make a fresh attempt at the positional red winner we are discussing.

Alternatively, you may pot-red with a gentle run-through which leaves your ball in the same position on the other side of red. This is the favourite method, and is more dependable unless you play your screw-shots extremely well. But, in my own play, I must confess that I am not desperately keen on taking the extra red. I may do it occasionally, but prefer as a rule to play the cannon instead. This may be reckoned more of a personal liking than anything else, and if you can pot a ball as well as you must to have any hope of success at spot-end play, then I advise you to take the extra red at every opportunity. The upshot is that it places you three points to the good and leaves the position I generally cannon from. If you do this several times in a break you are piling up a difference which tells in your favour with cumulative effect.

When you come to the cannon play it as in Diagram 20, to leave red available for potting in such a way that correct cannon position is regained. Here, in the fewest possible words, you have the theory of spot-end break-building. But like so many things of extreme simplicity in theory, it is a vastly different thing when you come to grips with the practical side. You may leave red tight against the cushion instead of as in the diagram, or cannon and put red in usable position, but leave your own ball annoyingly covered

for the red winner. There is only one remedy, that is, to practise until you score your cannon and leave red where it must be for a continuation of top-of-the-table play. If you are unable or unwilling to devote much time to this sequence, and it will take you a fairly long time to be confident of success with it, then I advise you to abandon all idea of becoming a spot-end exponent. Having taken this retrograde resolve, all you have to do is to play the cannon in Diagram 20, to leave the red near the pocket and top cushion, then put red down to set-up the familiar half-ball loser off the spotted red, and away you go on the open game.

Not at all a bad game, either, and I advise you to be content with it whenever red happens to run where it is taking a risk to try a pot to retain spot-end position, while the pot to leave the cross-loser is relatively easy. Many a match has been lost through neglecting this precaution. Strive your hardest every time to keep red in perfect position for your spot-end break, but if you leave dubious position for this and perfect position for open play, then never strain your billiards by attempting something elaborate and difficult merely for the sake of prolonging your stay at the top.

Perhaps I ought not to have said this, as my immediate purpose is to teach you spot-end play, not deter you from it. But I do not wish to induce you to pay too big a price for what measure of proficiency in this advanced phase of the game I may assist you to gain, and that is why I want you to keep an eye on that cross-loser.

For practice purposes leave it and reckon it a 'miss'. Allow compulsion to open the game to equal the end of your break when practising at the head of the table. But make the shot which so ends it, and play it as

carefully as you would in the final of your club handicap. Keep that little book handy, start from No. 20 position, decide that you will score a break of ten or a dozen before playing a shot from hand. You may find this a more severe test than you imagine. Not as a sort of personal record, but as a regular thing, I mean. When you would like to lay evens about making ten or a dozen from the leave before us, then raise your limit to twenty. It will take you a long time to get from twelve to twenty, and much longer still to get from twenty to thirty. Then, however, when once you feel confident about collecting a break of thirty from Diagram 20 position you will reap a double reward. You will score well enough at the spot-end to make that aspect of the game lucrative, and your further progress will be much more rapid. You will pass on to making fifty breaks at the spot-end quite as a matter of course, and your further progress will only be limited by the amount of time you can give to practice. All billiards is like that. Up to a point break-building is hard work all the time. But it becomes easier the farther you go, a point I want you to keep in mind when you feel like giving up in despair. Never do that; the change for the better is sure to come if you work harder than ever when that inferiority complex is trying to put you down and out.



## CHAPTER VIII

### MORE ABOUT THE SPOT-END

**W**HEN you get really interested in that little book which records your serious endeavour to cope with the subtleties of top-of-the-table play I want you to note with care the shot that beat you at the end of each attempt to get the break you set yourself to make. You can learn more from this than from any other one hint I can give you, as in billiards we do indeed learn from our failures. I wish you to benefit from mine, for there was a time when I had everything to learn concerning what I am trying to teach you, and in passing on the lesson I want to help you to avoid what I discovered after many mistakes. This is not so much a matter of individual shots. It is what I should prefer to call group series play at the spot-end, a view-point I believe to be an innovation.

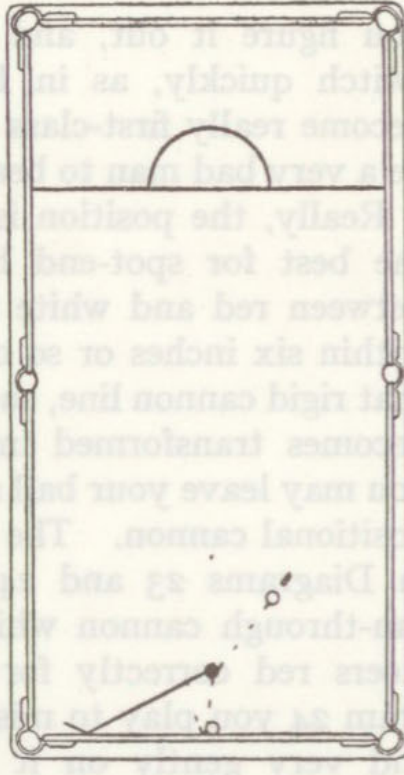
Diagram 21, for example, introduces a group of shots which can be played with practically no difference in the lie of the white. If that ball is tight against the top cushion at the cannon angle in the diagram, you have the old, 'postman's knock' leave, where you retain position by cannoning full on white and getting a gentle double-kiss from that ball, which leaves your ball in precise position for potting red, and keeps white on the same spot. In theory, there is no reason why you should not continue this 'postman's knock' movement until the governing body steps in to stop your break by means of some new and very justifiable limitation.

In practice, however, you are confronted by the problem illustrated in Diagram 21, which shows the double-kiss cannon, pot-red series. The point of difficulty is that in order to cannon correctly for position, you must leave your ball on a line very closely approximating to that in the diagram. By a very astute use of side you may overcome a slight deviation from this positional line, but the permissible margin of error is not enough to condone more than an almost imperceptible mistake. The cannon leave has to be identical every time or you must complete your cannon on white in a manner which takes that ball from the one and only spot where the double-kiss operates positionally. It is a big problem to continue putting red down and making sure of your cannon leave on the line you want. Sooner or later, it will beat you, generally a good deal sooner than you expect.

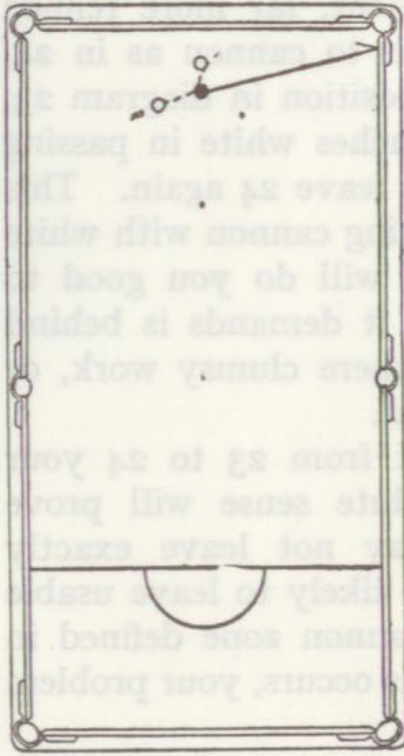
Then, with your ball off the line for the 'postman's knock', you have an opening for deadly match-winning billiards. This is indicated in Diagram 22, where your ball is plainly hopeless for the double-kiss cannon. But you can cannon very gently on the far side of white, trickle red over the pocket, put it down to leave the cross-loser, and then continue with red-ball play until you get 'back to the top' via the route shown in Diagram 17. This cut-and-thrust billiards is remorseless in the rapidity with which it switches from one lucrative scoring method to another, and has a latent defensive aspect too important to be overlooked. You see this when you consider the extremely limited scoring outlook presented to an opponent whose ball is pinned continuously in position for the 'postman's knock'. What is he likely to have left if you miss anything while operating on red? Not much when



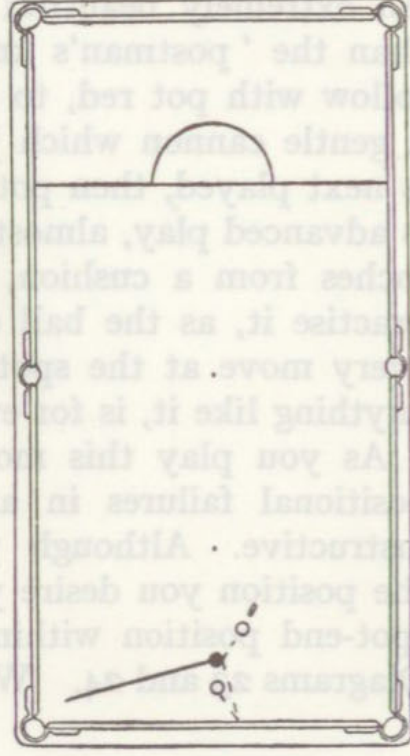
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23



24

you figure it out, and if you are not reluctant to switch quickly, as in Diagram 22, you may never become really first-class at the spot-end, but you will be a very bad man to beat.

Really, the position in Diagram 21 is by no means the best for spot-end break-building. The distance between red and white is too great. Move white to within six inches or so of red, as in Diagram 23, and that rigid cannon line, such a perplexity in Diagram 21, becomes transformed into quite a little zone where you may leave your ball available for the indispensable positional cannon. The limits of that zone are shown in Diagrams 23 and 24. In 23 you play a careful run-through cannon which barely brushes white and steers red correctly for the winner leave. In Diagram 24 you play to miss white going up, cannon full and very gently on it via top cushion, using just enough side for this, and thus keep the red in place. An extremely beautiful movement, far more refined than the 'postman's knock', is to cannon as in 24, follow with pot red, to leave position in diagram 23, a gentle cannon which just touches white in passing is next played, then pot red to leave 24 again. This is advanced play, almost a rocking cannon with white inches from a cushion, but it will do you good to practise it, as the ball control it demands is behind every move at the spot-end, where clumsy work, or anything like it, is for ever fatal.

As you play this movement from 23 to 24 your positional failures in an absolute sense will prove instructive. Although you may not leave exactly the position you desire you are likely to leave usable spot-end position within the cannon zone defined in Diagrams 23 and 24. When this occurs, your problem

is to plot two shots ahead with such exactitude that spot-end position is not lost. Diagrams 23 and 24 should be carefully studied and tested on the table to get at all they convey. The point is that you have to play the cannon in 23, to leave red where you can pocket it to gain position as in 24. Upon analysis, this means that you must predict your red winner and continuing cannon when playing 23. Very few amateurs get as far as this in grasping the true principles of spot-end billiards. They realize that they have to cannon to leave red, but fail to see the full importance of placing red when they can pocket it to leave another facile cannon, and of predicting this vital positional sequence two strokes ahead. There is only one way to learn how to do this, and that is by means of a simple dot of chalk on the table.

Place the balls as in Diagram 23. Study the position very carefully, then make a tiny mark on the cloth where you mean to leave your ball after you have cannoned and potted the red. If you fail, as you will with disconcerting frequency to begin with, pause to think out the cause of your failure. It may be that you cannoned and left red badly, or that you pocketed red with a poor shot. Think until you satisfy yourself that you can see exactly where you went astray. Then replace the balls as in 23, and play your sequence for the 'chalk-spot leave' all over again. When you get your sequence under command, and can play it with confidence, together with some of the many variations presented in the zone of cue-ball position available, you will be well on the way to success as a spot-end exponent. You will have a playing grasp of the 'cannon-pot-red-leave-another-cannon' sequence which is everything at the head

of the table. Rightly considered, it should be visualized as one shot. You should always see that chalk-mark in your mind before you play the first cannon. As you progress, the high standard of executorial precision will test your perseverance to the limit. Time after time you will discover that 'so little means so much', that a mere turn of your ball decides between success and failure. There is no more luck in the class of billiards we are discussing than there is in the working of the power of gravity. Every shot is a scientific problem, the solution of which lies on that chalk-spot, or, very likely, a short line away from it leaving identical cannon position.

The first thing you will learn will be this—it is by no means easy to predict just where you want red to be for your positional pot. You are likely to be badly mistaken about this when a spot-end novice, which means that you will get the position you play for, only to find it useless as a route to that chalk-spot you must never forget. When this happens, start afresh, watching your winner leave very keenly to avoid the positional trap you have just detected. When you are sure you have left red correctly, you will next discover an amazing variety of ways of potting the red and leaving your ball off the chalk-spot, or the cannon line equalling it.

There is no remedy except practice, hours and hours of it. What I am asking you to do amounts to the essentials of spot-end play stripped of all side-issues. When taking the lesson in this chapter you are opening the path to success as a whole. The exercise in forecasting your chalk-spot is an education in itself; getting your ball on that spot after your cannon and red winner is the executorial perfection of your

trained judgment in predicting the spot correctly. This can be made intensely interesting. If you have within you the stuff that good cuemen are made of, you can spend an hour at this and marvel that the time has passed so quickly. That is the spirit you want. It will come when you are proficient enough to take a knowledgeable interest in what you are doing. Your problem is to fight against boredom before this stage is reached.

As you wrestle with these spot-end problems you may feel that such specialized play is rather too much for an amateur, that you had better return to the open game because of the greater scope it offers for retrieving positional errors, or avoiding them altogether. There is much to be said for this argument. The right to place your ball anywhere you please in the 'D' after a losing hazard is an advantage which cannot be discounted. Another point is that, in red-ball play, or white on occasion, you have a positional zone offered from hand which is limitless when compared with the confined area in which you must operate at the spot-end. All this is true, but there is this great compensation in spot-end play—you are closer to your work. This means that your target, both positionally and in a scoring sense, is nearer to you and more easy to hit with the requisite precision. There is a great deal in this when once your spot-end positional objective is clear and sharp.

Amateurs know what they are doing when they play losers approximating to the half-ball set positions they have flogged away at and got under useful control. But they begin to get hazy the moment they approach the spot-end, and usually allow an elementary stroke to beat them on ball-control because they are not sure

what leave they should get. My sequence practice for the 'chalk-spot' will change all this. It enables any amateur to envisage spot-end potentialities with a professional eye, replacing surmise with certainty in design, a gain which makes a tremendous difference in favour of persevering with this absorbing and profitable scoring method.



## CHAPTER IX

### SPOT-END VARIATIONS

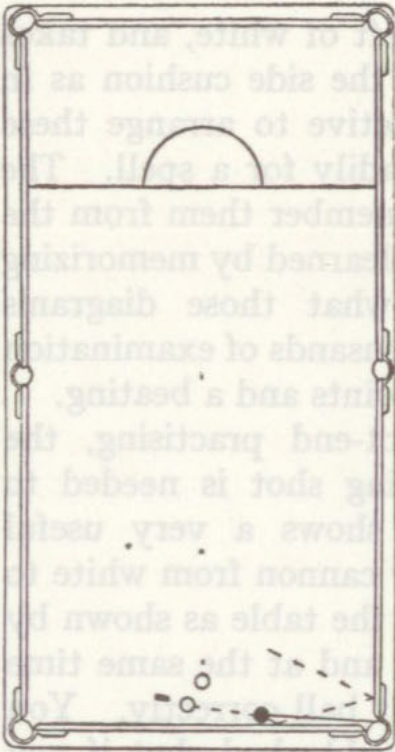
**R**EMEMBER this, do what you will your command of the balls at the spot-end can never be absolute. It is always relative to positional exigencies beyond your complete control. Were it otherwise, either the 'postman's knock', or that 'chalk-spot' sequence would equal a perpetual scoring method. That cannot be; the balls are sure to run more or less out of hand sooner or later (the 'less' the better, and the 'later' the better, of course). When this occurs you have all sorts of positions to deal with to maintain your stay at the spot-end. Many of these may be considered normal, but not ideal.

For instance, Diagram 25 presents a leave of the type you seek to avoid. Red is just clear of the top cushion, and with the cue-ball at the angle shown offers an excellent practice pot into the facing top pocket. It will improve your potting if you play to put that red down the best way you can, but for spot-end break-building there is only one way to do it. This is by running your ball through with left side on it and leaving position as per dotted line after pocketing red. Not by any means an easy shot, I admit, but you should notice that you have distinctly useful cannon position if your ball stops short of the ideal leave indicated in the diagram. Incidentally, it is worth digressing to point out that the run-through red loser, played with powerful left side, is offered as an avenue to the open game if you are nervous about that

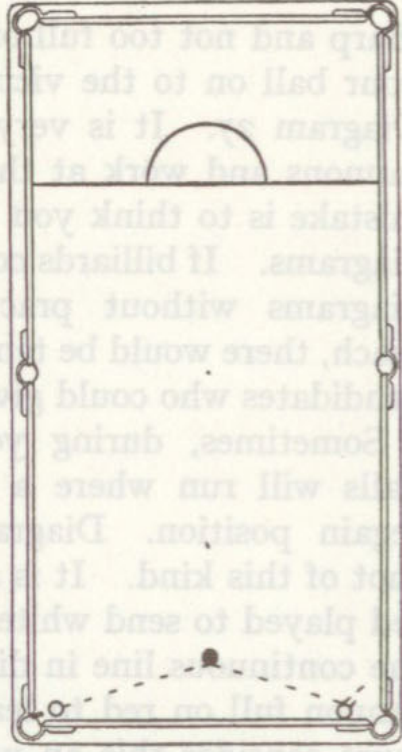
pot-red. I do not want you to cultivate the habit of quitting spot-end play when a good shot is needed to keep you at it, but I must say that if you feel a qualm about one shot and sure of another, always take the one you play with confidence if usable position can be expected from it.

This is an invariable rule, and its general application is worth studying carefully. We can all instance countless positions where two or three alternative shots are offered. Then it is always the game to play the one shot which offers one hundred per cent positional efficiency. But if that shot is not one of your best as a rule, and either of the others, which will leave something else you can score from, appeals to you as a personal preference, then play it by all means. Always provided due regard is given to position, I am a firm believer in allowing individuality full play in stroke selection from a leave of several possibilities. Otherwise, you would reduce break-building to the mechanical mass production of a given output of points, which is not the game of billiards I play or want to teach you to play.

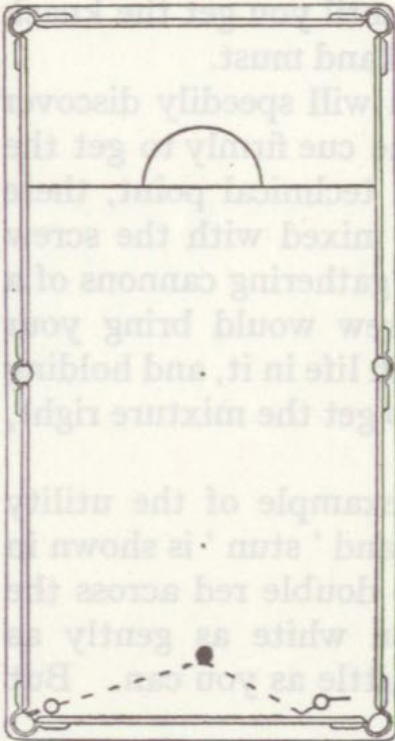
Diagram 26 is of special interest as showing the sort of shot you want when spot-end position is hopelessly lost. White is a little away from the cushion, and with the cue-ball and red as shown, the obvious cannon had to be played. But if you are not careful you will play it to either pot white or leave white useless in the jaws of the pocket, a decisive disaster. To avoid this, play a well-judged shot with plenty of right-hand side on your ball, taking cushion before white as in the diagram, and thus leave the white loser. If white is tight against the top cushion then you must avoid getting behind it, playing a cannon which scores



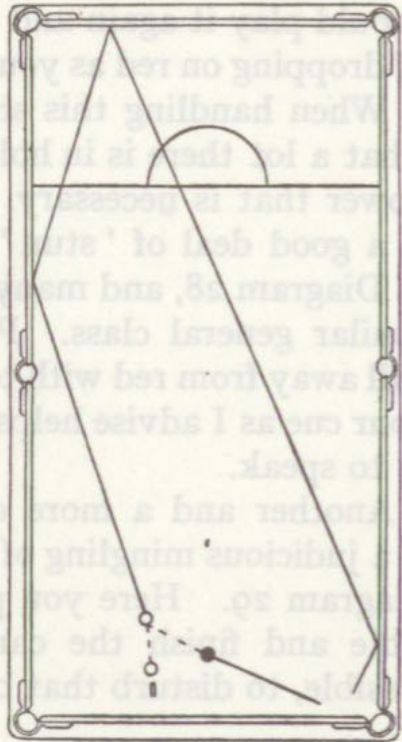
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sharp and not too full on the left of white, and takes your ball on to the vicinity of the side cushion as in Diagram 27. It is very instructive to arrange these cannons and work at them steadily for a spell. The mistake is to think you can remember them from the diagrams. If billiards could be learned by memorizing diagrams without practising what those diagrams teach, there would be tens of thousands of examination candidates who could give me points and a beating.

Sometimes, during your spot-end practising, the balls will run where a gathering shot is needed to regain position. Diagram 28 shows a very useful shot of this kind. It is a screw cannon from white to red played to send white round the table as shown by the continuous line in diagram, and at the same time cannon full on red to leave that ball correctly. You must consider this an unpardonably bad shot if you cannon on red with indifferent positional results, and should play it again and again until you get the knack of dropping on red as you should and must.

When handling this shot you will speedily discover what a lot there is in holding the cue firmly to get the power that is necessary. On a technical point, there is a good deal of 'stun' effect mixed with the screw in Diagram 28, and many other gathering cannons of a similar general class. Pure screw would bring your ball away from red with too much life in it, and holding your cue as I advise helps you to get the mixture right, so to speak.

Another and a more direct example of the utility of a judicious mingling of screw and 'stun' is shown in Diagram 29. Here you play to double red across the table and finish the cannon on white as gently as possible, to disturb that ball as little as you can. But

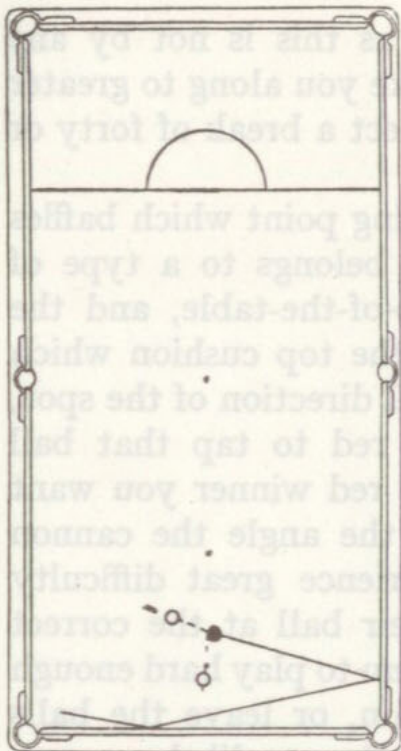
mind you cannon full on white to avoid the cover. The main thing in making this shot at proper strength is to hold your cue firmly enough to get the power adjustment under control. Many variations of this shot occur, sometimes when white is on the other side of the spot, lying between the spotted red and top cushion. When this is the case, exceptional care must be taken to avoid the kiss as red doubles across for position. Before playing a shot of this character it is as well to take a second look at the balls to make sure that a pot-red will not prove the better stroke.

Also, as you become proficient at these gathering shots, it is wise not to become over-fond of them. You are likely to think you can do all sorts of things by doubling the first object-ball of your cannons into spot-end position. This way of thinking may induce you to neglect clever and profitable one-cushion cannon movements, of which we see a pretty example in Diagram 30. Here you play to cut red very fine indeed on a line to the top pocket, and cannon full on white with reverse side on your ball. It calls for neat cue-manipulation to make this one really well, and it is no use unless you do it perfectly. This is one of the many shots at the spot-end where only exquisite precision will suffice. Do not forget my chalk-spot hint when playing No. 30, as it is a very nice problem indeed here to predict your cannon result to leave the cue-ball commanding red where you can put that ball down for your continuing cannon. It will help you to pause and work this out in Diagram 30 before you play the shot.

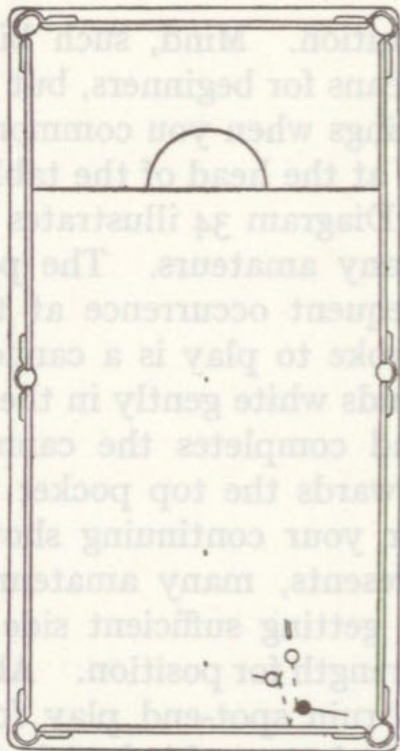
Diagram 31 presents another spot-end problem you can work away at for longer than you may think before mastering it. Red is almost touching the side cushion.

with cue-ball between red and white as in the diagram. It is simple to make that cannon and leave red somewhere near the pocket. But if you are content with that your stay at the spot-end will not be long. The correct shot cannons full on white and taps that ball neatly towards the spot, leaving red so near the pocket that you can put it down with ease to gain your ensuing cannon position, using what side may be necessary for this. It is a very great gain in spot-end play to leave red and cue-ball in the corner and conveniently near to each other, so that you can hit red on any one of several places and still be sure of dropping it in the gaping pocket, at the same time imparting what positional rotation your ensuing shot may require the cue-ball to carry.

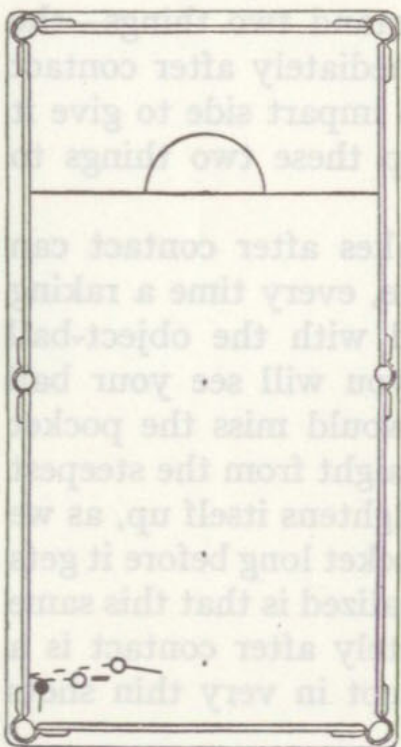
An instructive variation of 31 is presented in 32. The cue-ball is no longer between red and white, but so placed that a baby cannon is offered direct from white to red. This is not the shot you want, as it is taking white in altogether the wrong direction. Instead, play fine off red first, as in diagram, and cannon on white to tap that ball once more towards the spot, where you are everlastingly needing it for cannon purposes. Diagram 33 presents an advanced movement of the same general design. An extremely easy ball-to-ball cannon is presented, and has its own positional value if handled as such. But as a top-of-the-table proposition the position of white is the insistent factor. That ball is too remote from the spot to be where you want it for spot-end break-building. So you play very fine off red, just miss white at first and cannon with an unmistakable click on white via the side cushion. This will usually leave a close cannon offering facile retention of spot-end



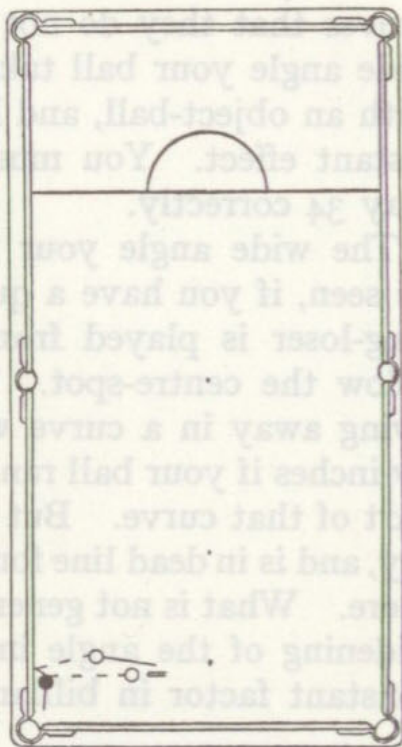
29



30



31



32

position. Mind, such billiards as this is not by any means for beginners, but will take you along to greater things when you commonly collect a break of forty or so at the head of the table.

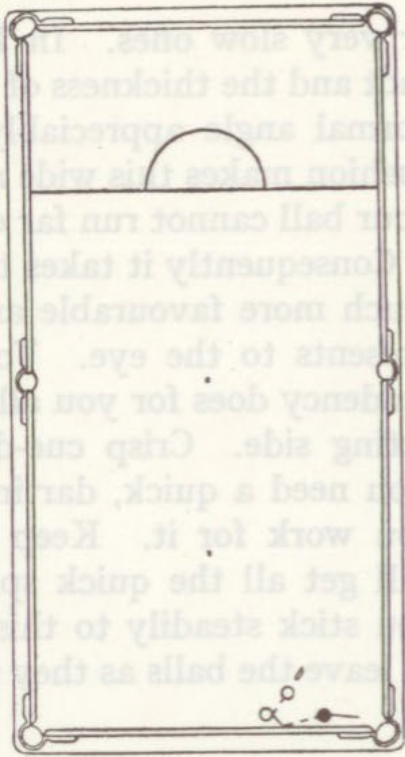
Diagram 34 illustrates a playing point which baffles many amateurs. The position belongs to a type of frequent occurrence at the top-of-the-table, and the stroke to play is a cannon off the top cushion which sends white gently in the general direction of the spot, and completes the cannon on red to tap that ball towards the top pocket for the red winner you want for your continuing shot. At the angle the cannon presents, many amateurs experience great difficulty in getting sufficient side on their ball at the correct strength for position. Allow them to play hard enough to ruin spot-end play for certain, or leave the balls safe for any kind of break-building, as likely as not, and they will score the cannon every time. This proves that they do not understand two things—the wide angle your ball takes immediately after contact with an object-ball, and how to impart side to give it instant effect. You must grasp these two things to play 34 correctly.

The wide angle your ball takes after contact can be seen, if you have a quick eye, every time a raking long-loser is played from hand with the object-ball below the centre-spot. Then you will see your ball swing away in a curve which would miss the pocket by inches if your ball ran on straight from the steepest part of that curve. But it straightens itself up, as we say, and is in dead line for the pocket long before it gets there. What is not generally realized is that this same widening of the angle immediately after contact is a constant factor in billiards except in very thin shots

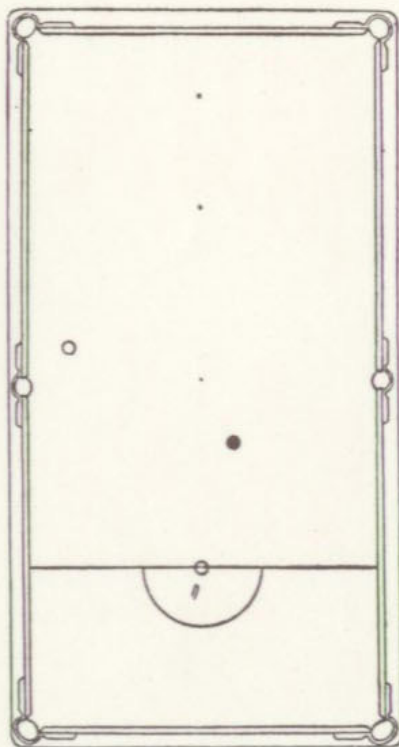




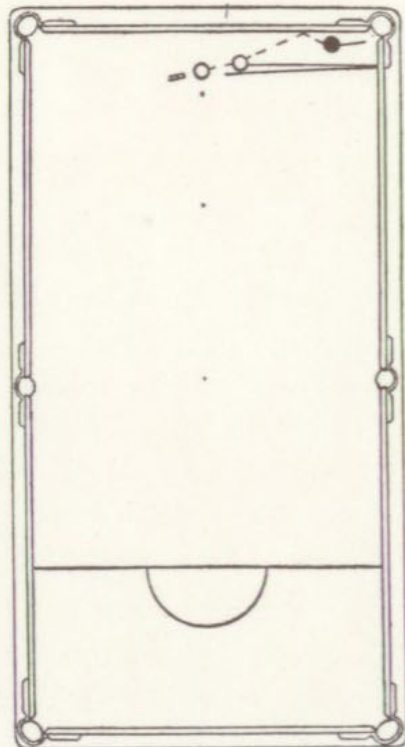
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34



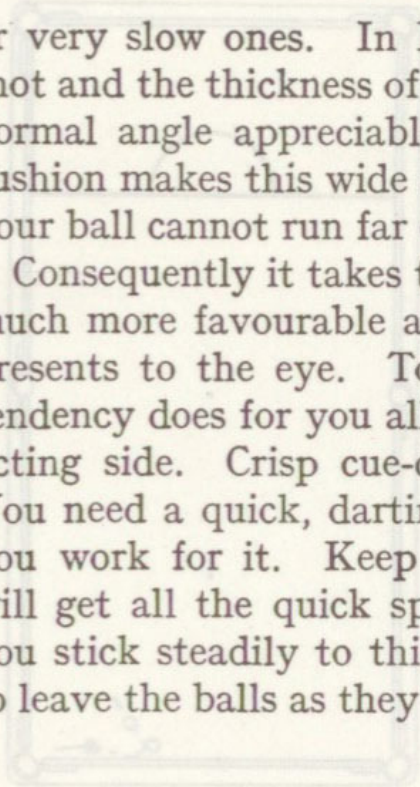
35



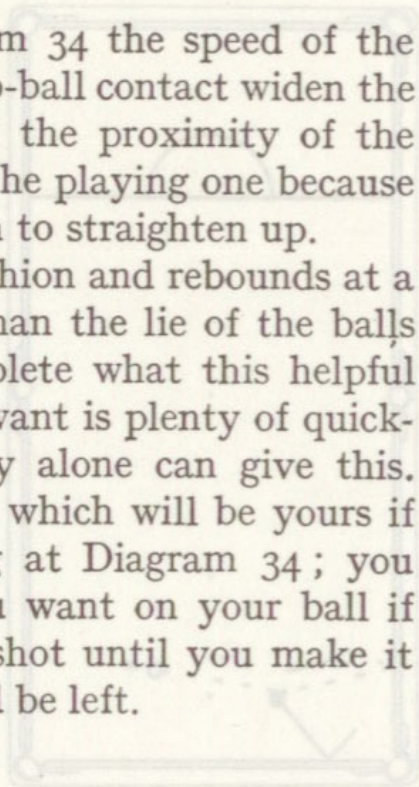
36

or very slow ones. In Diagram 34 the speed of the shot and the thickness of ball-to-ball contact widen the normal angle appreciably, and the proximity of the cushion makes this wide angle the playing one because your ball cannot run far enough to straighten up.

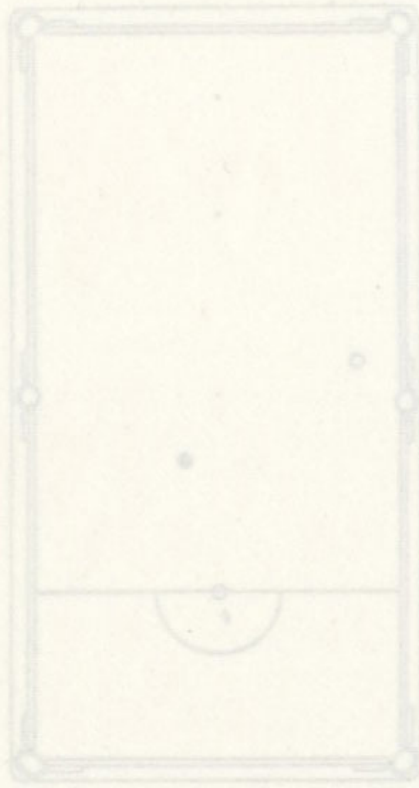
Consequently it takes the cushion and rebounds at a much more favourable angle than the lie of the balls presents to the eye. To complete what this helpful tendency does for you all you want is plenty of quick-acting side. Crisp cue-delivery alone can give this. You need a quick, darting tap which will be yours if you work for it. Keep trying at Diagram 34; you will get all the quick spin you want on your ball if you stick steadily to this one shot until you make it to leave the balls as they should be left.



NE



EE



## CHAPTER X

### MORE VARIATIONS

**B**ECAUSE I am continuing my varied theme I do not wish you to think that command of an assortment of unusual strokes is my billiards ideal. My conception of variety is the making of a four-figure break which exhibits an interesting proportion of every known scoring method in a break-building sense. This is showmanship and something more than showmanship. The people would soon tire of watching me if I exploited nothing but spot-end play for half an hour or more, or kept a run of close cannons moving almost indefinitely. They would tire even more quickly if I piled on century after century by those open methods familiar to amateurs in their own play. I avoid boring the people by mixing my billiards on purpose to give full entertainment value. At the same time I avoid tiring myself, and play the better in consequence. Really, I am engaged on a series of breaks linked by shots which switch me from one type of billiards to another, and thus keep my interest keen from first to last.

The full realization of the above ideal is preaching more than I can expect my readers to practise. But while this is true, I want to point out that it teaches you to appreciate the value of deliberate variation in break-building. Mostly, you will get enough variety without the least necessity for straining after it, as the balls may be trusted to look after that part of the programme. An exception is seen, however, in

red-ball play, which plenty of amateurs handle well enough to make it worth their while to plan a deliberate break-away from it on suitable occasion.

Diagram 35 illustrates a case in point. White is badly placed against the side cushion, red in ideal middle pocket position, cue-ball in hand. Here, if you have a sound working acquaintance with my magic circle, you can continue with red until the official 'limit' begins to threaten. Then two things present themselves—you need a cannon badly to break the red-ball sequence, but have so attuned hand and eye to keeping red under control that you are not in touch for setting-up and playing the cannon you need. Remember, the strain of continuity of accuracy is beginning to tell. You have taken something out of yourself while operating assiduously on the red. It would pay you better, if you want double-century breaks to be no rarity, to be moderate in your toll off the red and set the cannon up while you are fresh enough to be interested in it. Do this and you will find it equals starting again on a new line of thought and concentration, a welcome relief which tells far more in break-building than is generally realized.

There are many ways of plotting a cannon leave from the position in Diagram 35, and as I am now specializing for the moment for hundred-break amateurs who ought to make two hundred breaks galore, and breaks of four or five hundred quite frequently, I do not propose to give a batch of diagrams and pages of instructional matter on gaining cannon position from 35. Think it out and work it out for yourself. That will school you to feel that you do not mind changing from red-ball play to get a three-ball break moving. Persevere with this mood, apply it

to every other phase of the game. Make them all your servants, not masters. Pay each a visit, if you can, make the visit add appreciably to your break, but never prolong your stay as if everything depended on keeping the balls under control for one scoring method. I am anxious to stress the foregoing with all my power, as I am convinced that plenty of capable amateurs are in a groove simply because of their reluctance to quit one aspect of the game they favour. This feeling makes their billiards lop-sided, and appeals to me as the main reason why hundred breaks are accepted as a standard of amateur value which ought to be multiplied by five.

But, mark this, the ability must be present to support a confident all-round outlook in the compilation of your breaks. That is why I want the amateur to train at everything. A man who can make a couple of dozen nursery cannons, a dozen red losers, and thirty or forty at the top-of-the-table is sure to keep on improving. He experiences no demoralizing sense of loss when a mere turn of a ball compels him to turn from a beloved sequence and change the whole nature of his break. Of course I know very well that such all-round ability is not to be taken as a sort of preliminary detail. Hard work and plenty of it will be needed to attain the standard specified in this paragraph. But my point is that such hard work does not lead to a dead-end, as over-specialization must and will. This explains why I advise practising every phase of the game in ordered sequence at every opportunity as soon as rudimentals are mastered. Those who have over-specialized would be well advised to practise away from what seems to be their strength, but is really their weakness, taking the long and big

view. For instance, if a man can play the red-ball game so well that he revels in every opportunity to exploit it, and commonly takes heavy toll from any suitable opening, then I should advise him to cry 'enough', practise a few long losers just to keep this key-shot from rusting, and devote himself to nursery cannons instead of the red ball.

At first he will find this apt to be extremely disconcerting. He will experience a bad time during which his game may appear to be falling away to an alarming extent. If he then decides to stick to the red and abandon his nursery cannon training he will be a red-ball slave for ever. But if he will only persevere his reward is certain. There will come a time very probably when he least expects it, when he will feel comfortable with either a red-ball opening or a chance for close-cannons. Then he will discover that his red-ball game has not really been affected by the cannon training. There has been some temporary set-back; that is to be expected and allowed for, but the ability is unimpaired as a latent scoring force which is sure to assert itself anew when the bad time wears away. The same principle applies to spot-end play. Concentrate on this in turn, and you will emerge an all-round cueman in every sense, and make breaks of four or five hundred as readily as you now make your centuries. It is precisely the method I employed to make thousand-break billiards the accepted standard of professional play instead of the altogether exceptional, and I am confident it would effect an even more startling improvement in amateur breaks if acted upon with persistent insight.

It is a question of balance, of grasping the game as a whole, not as a particular method of play. Amateurs

will train themselves into a cul-de-sac, and consider their end reached when they are up against nothing except an artificial limit they have set to their own progress. I expect your criticism will be that this is all very advanced, but I do not altogether agree with such a view. How many amateurs are there who commonly make hundred breaks? Scores in London alone, many in Australia to my personal knowledge, and if we say there are hundreds of them taking the Empire through, I feel we are underestimating the truth, as my opinion is that the total would run into four figures with ease. From such a body of trained amateurs I am certain that players capable of making breaks of four or five hundred ought to emerge, and that the amateur break record should touch the thousand mark. That is why I have written a whole chapter on variations in the exploitation of scoring methods, a subject hitherto left untouched, or even exhibited in a false light, as it is by no means uncommon to read that amateurs should be content to get their billiards into whatever groove is lucrative enough to bring them to hundred-break form, and then leave the higher flights to professional exponents.

I do not believe in this. If any amateur takes his share of my 'tap, tap, tap' shot to gain touch for close-cannons, perseveres with my one-ball practice shot to learn the masse stroke, and keeps an eye on the magic circle for his losing hazards, with the old spot-stroke for potting practice, he will be surprised at his progress if he keeps his practice balanced in due proportion. There is particular truth in this for those who now make their three-figure breaks, doubtless without ever having practised on the lines I have proved to be right. If they are guided by my advice

in this chapter as a general pointer, and apply it as they practise the particular strokes and sequences I have given and shall continue to demonstrate, then I shall have the pleasure of knowing that I have done as much for amateur billiards as I have for the professional game, perhaps even more, and I shall be abundantly content.



## CHAPTER XI

### ASSORTED SHOTS

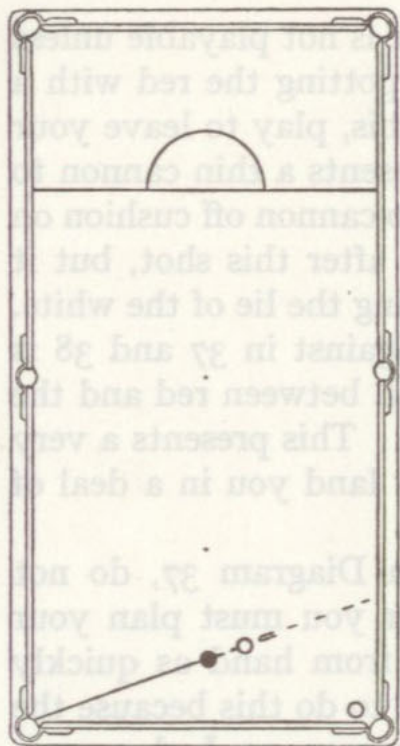
**I** MIGHT have called these 'retribution' shots but for the vindictive hint in the adjective. They are shots the balls compel you to play when you allow them to get out of hand. There is no limit to their number or variety. Anything may be left by bad positional play, from a double-baulk to a scorable shot which falls but little short of the ideal. Diagram 36 exhibits a leave of the latter kind, a run-through cannon at the spot-end you have to play because you left the red covered instead of open for the winning hazard you ought to have left.

At least we will so regard it. We all know that an opponent may leave you any sort of shot at the beginning of a break. You get an assortment in this way, and will learn how to tackle them when dealing with the more plentiful assortment you are sure to leave for yourself through imperfect ball-control. The stroke before us is not a terrible specimen, but when it occurs in a break you will be wise to accept it as a warning that your ball-control is weakening and take care accordingly.

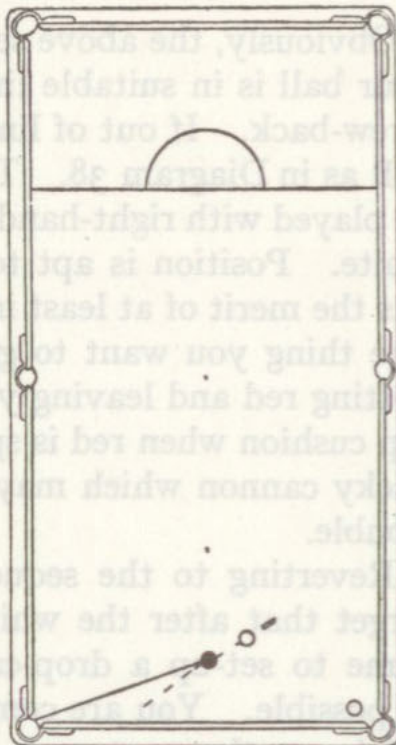
Play it with right-hand side, of course, just a crisp little follow-through which sends your ball spinning off the top cushion to tap red neatly towards the top pocket. At the same time direction of white and strength of play should leave white near the spot for your continuing cannon. Here, you see, we get back to that chalk-spot again. When you play the cannon

in No. 36 you should have a clear idea of where you mean to leave your ball after the pot-red which follows the cannon. Regarded in this way, that simple cannon is not so easy that you can afford to handle it thoughtlessly. A downright bad shot may leave your ball against the top cushion and too near red to offer much prospect of scoring. A usable result would leave red out of line for the positional pot, but offering a loser into the top pocket. This compels you to open the game and return to baulk. Do it rather than try anything fantastic to stay at the top, but remember that playing the loser is a confession of failure to retain position for top-of-the-table play. Very little will bring you to this when 36 is before you. Too much or too little side, a slight mistake in strength, and away goes your ideal. That chalk-spot you have in mind must be wiped out. Your lack of ball-control has compelled a complete change in your positional objective. A weakness is thus revealed; practise until you transform it into such strength that you feel assured that No. 36 is well under command for perfect spot-end brake-building.

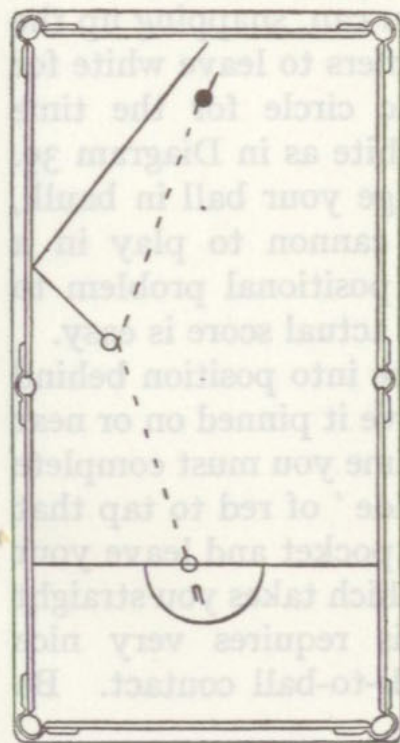
In Diagram 37 we see a leave you should always treat with very great respect. Here, for a change, white is the problem ball. It is fairly near the top pocket, as indicated in the diagram, red is on the spot, with your ball between them. White is sure to cover the left top pocket if you want to pot red in it from the spot, and the proximity of white to that pocket makes it desirable to clear that ball away as quickly as possible into less risky position. Therefore the best shot you can play is to screw-back smartly to the vicinity of the side cushion, thus presenting a simple white loser which at once extricates white from the danger zone.



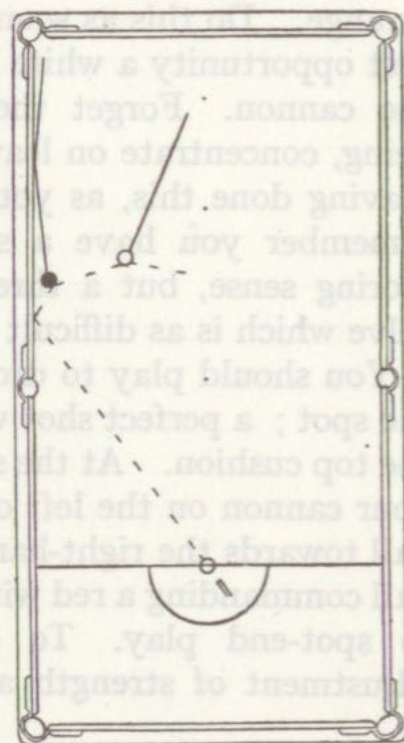
37



38



39



40

Obviously, the above sequence is not playable unless your ball is in suitable line for potting the red with a screw-back. If out of line for this, play to leave your ball as in Diagram 38. This presents a thin cannon to be played with right-hand side to cannon off cushion on white. Position is apt to vary after this shot, but it has the merit of at least improving the lie of the white. The thing you want to guard against in 37 and 38 is potting red and leaving your ball between red and the top cushion when red is spotted. This presents a very tricky cannon which may easily land you in a deal of trouble.

Reverting to the sequence in Diagram 37, do not forget that after the white loser you must plan your game to set-up a drop-cannon from hand as quickly as possible. You are compelled to do this because the red is on the spot, and in Diagram 39 I show you the type of drop-cannon you should handle white to arrange. Do this as soon as you can, snapping up the first opportunity a white loser offers to leave white for the cannon. Forget the magic circle for the time being, concentrate on leaving white as in Diagram 39. Having done this, as you arrange your ball in baulk, remember you have a simple cannon to play in a scoring sense, but a three-ball positional problem to solve which is as difficult as the actual score is easy.

You should play to drop white into position behind the spot; a perfect shot will leave it pinned on or near the top cushion. At the same time you must complete your cannon on the left or 'inside' of red to tap that ball towards the right-hand top pocket and leave your ball commanding a red winner which takes you straight to spot-end play. To do this requires very nice adjustment of strength and ball-to-ball contact. Be

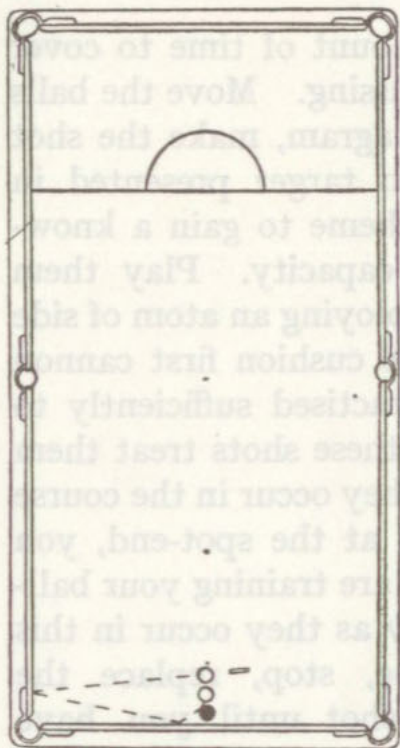
very careful to hit white thickly enough, using left side as may be required, and keep the stroke alive. It is a big mistake to play a sluggish shot which leaves your ball almost touching red at the finish, and you must not deceive yourself if this sort of play sometimes makes you a fluky gift of usable cannon position. It is fundamentally unsound, and you should avoid it.

By the time you have taken the balls from No. 37 to No. 39, and contrived to leave the balls well after your drop-cannon, you will appreciate the force of my earlier remarks concerning this class of stroke. In No. 37, of course, you had no option, but you can see how very much better it is to get spot-end position as in the diagram, where the red-winner movement obviates the drop-cannon. Another route to the head of the table is indicated in Diagram 40, where red is near or against side cushion with white in the direction of the centre of the table at the angle shown. This shot has many variations in presentation. With the cue-ball in hand, as in Diagram 40, you can spend a profitable time judging where to place your ball for these cannons wherever you can arrange them. Remember that you would not play a cannon of this type if a loser were offered from hand off white. Otherwise the shot is always good, and can be manipulated with advantage instead of forcing a direct cannon on occasion. There is no such alternative in No. 40, but you will discover it as you experiment with the general class of cannon before us.

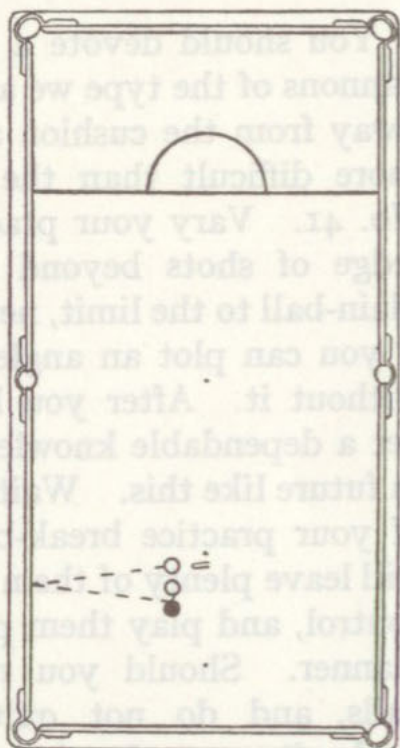
When playing these strokes, hit the cushion first with no side on your ball. I know these cannons can be made by using side, but I wish you to be thoroughly familiar with their range as plain-ball shots. The extent of this may surprise you, but you will see the

cause if you reflect that, in effect, you are playing a plain-ball shot off red in diagram from the point where your ball hits the cushion first as shown by the dotted line. This opens a greater scoring prospect than appears probable until you become familiar with it. Positionally, it is exceptionally sound because the objective of those cannons is to trickle red slowly along the side cushion towards the top pocket, at the same time tapping the white in the general direction of the spot. This movement cannot be guaranteed to give spot-end position, but may take you to it. I introduced it as an indicative route to top-of-the-table play, and do not intend to press it beyond this. But it is an absolute means of directing red into favourable position and improving the lie of white.

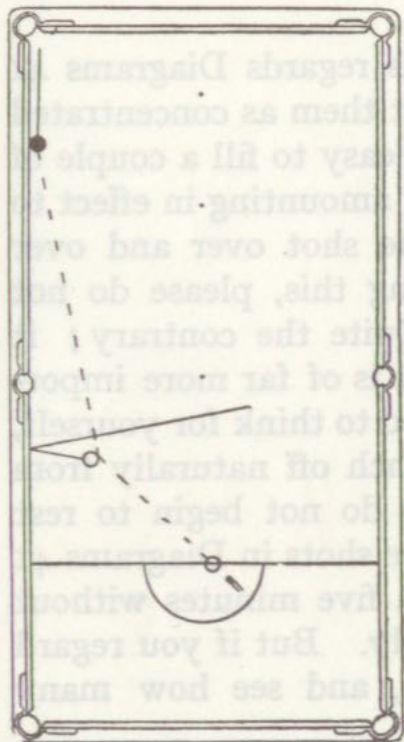
Although you will find the masse your mainstay at overcoming close-quarter covers, you must always be prepared to cope with the situation when the balls present a shot no masse could deal with. This takes you into a fresh aspect of cushion first cannon play, and in Diagram 41 I show an elementary example of the kind of shot you are always likely to want. All three balls are in line and almost touching, and with the cue-ball lying outside the other two the masse is ruled out because you cannot get at your ball to play the shot. The one-cushion cannon, as in the diagram, solves the problem readily enough, and is by no means a difficult shot. A possible touch on the top cushion immediately before contact with the object-balls will condone some error here, but when the cushion cannot be relied upon to assist in this way then shots of the general type shown in the diagram need very careful handling, especially when your ball has to travel a fair distance to the cushion and back again.



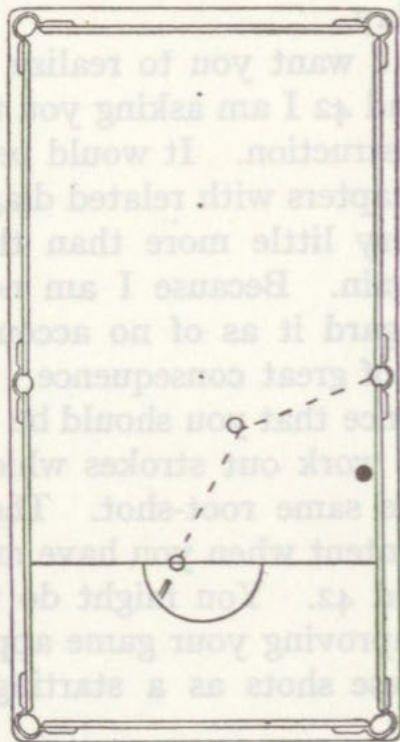
41



42



43



44

You should devote a fair amount of time to cover cannons of the type we are discussing. Move the balls away from the cushion as in diagram, make the shot more difficult than the cannon target presented in No. 41. Vary your practice scheme to gain a knowledge of shots beyond masse capacity. Play them plain-ball to the limit, never employing an atom of side if you can plot an angle for the cushion first cannon without it. After you have practised sufficiently to get a dependable knowledge of these shots treat them in future like this. Wait until they occur in the course of your practice break-building at the spot-end, you will leave plenty of them as you are training your ball-control, and play them perfectly as they occur in this manner. Should you miss one, stop, replace the balls, and do not quit the shot until you have made it correctly three times in succession. Then you will remember it when you want it in actual play.

I want you to realize that as regards Diagrams 41 and 42 I am asking you to treat them as concentrated instruction. It would be quite easy to fill a couple of chapters with related diagrams, amounting in effect to very little more than the same shot over and over again. Because I am not doing this, please do not regard it as of no account. Quite the contrary; it is of great consequence. But it is of far more importance that you should be coached to think for yourself, to work out strokes which branch off naturally from the same root-shot. Therefore do not begin to rest content when you have made the shots in Diagrams 41 and 42. You might do that in five minutes without improving your game appreciably. But if you regard these shots as a starting-point, and see how many



more you can make which answer the same general description, you embark on a task which will fill many profitable hours, and enable you to score with confidence from many leaves where everything seems lost.

### PREDICTIONAL PLAY

In a previous chapter I showed how a couple of well-played strokes transformed dubious position into an ideal opening for an open break. This is what I call predictional play, and is really an extension of the sound old adage, 'Always play for position.' True enough, but if you can see two strokes ahead instead of one you advance into another class of cue-man. That chalk-spot at the top-of-the-table is a case in point, and I now propose to give other instances of a more general kind. The utility of these strokes is the variety they give to your practice and the all-round strength they add to your game. I am most anxious not to encourage the production of mechanized billiard players, who must have the balls left precisely so or they cannot get going on a break, or keep one moving in confident style.

Diagram 43 presents a shot in point. It is a very ordinary cannon from hand, direct from white to red, and so simple that the veriest novice would expect to score it every time, however badly he might do so. A more knowledgeable player would take care to arrange the cannon to double white across the table as in the diagram, and endeavour to complete the cannon on red to leave that ball offering a top-pocket hazard of some kind. This is commendable as far as it goes, but is not the best of predictional play. To achieve this you should face the cannon in Diagram 43, with the fixed idea of getting in-off red as quickly as you can.

## CHAPTER XII

### PREDICTIONAL PLAY

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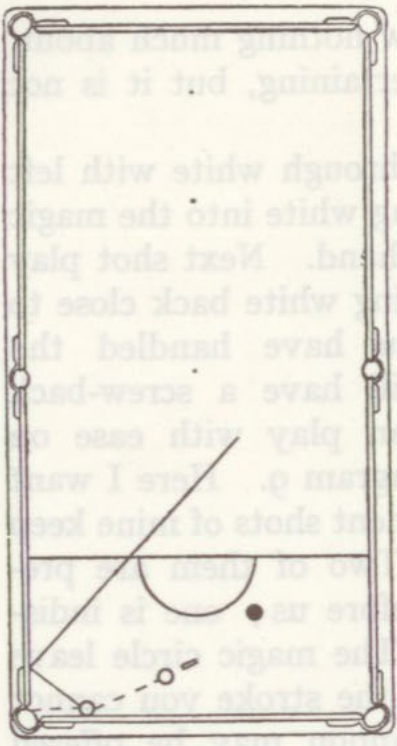
The position of white renders this imperative. That ball is available for a loser from hand, but out of cannon range as a sequel to No. 43. You have to operate on red alone after the cannon. The most you can score by potting red is nine points, a free red winner to begin with, followed by two spot-strokes. Then red is spotted on the centre-spot, and I do not advise you to predict what you may do by the time you get as far as this. In fact, I do not wish you to predict those three red winners; the sequence is too difficult to manipulate to be worth attempting for the centre-spot position result. My object in mentioning it is to explain precisely what there is behind my original remark that you must 'predict' a speedy in-off red when playing the cannon in Diagram 43.

The best way of doing this is to leave a red winner which you play to set-up the familiar cross-loser off the spotted red. This will bring red to the same side of the table as white, and should offer a choice of losers into the same pocket. When you attain this you have realized to the full the predictional problem presented by the cannon in 43. Work it out on the table, make your cannon, put the red down, leave the cross-loser, score that, then pause to take a satisfied look at the position. As you do so, remember that I want you to cultivate the habit of looking ahead in this way. The position is that you have scored eight points and have the balls in far more lucrative position than they were when you began with the cannon. If you see all this before striking your ball for the cannon, you begin to realize the value of that thinking ahead which embodies my conception of predictional play.

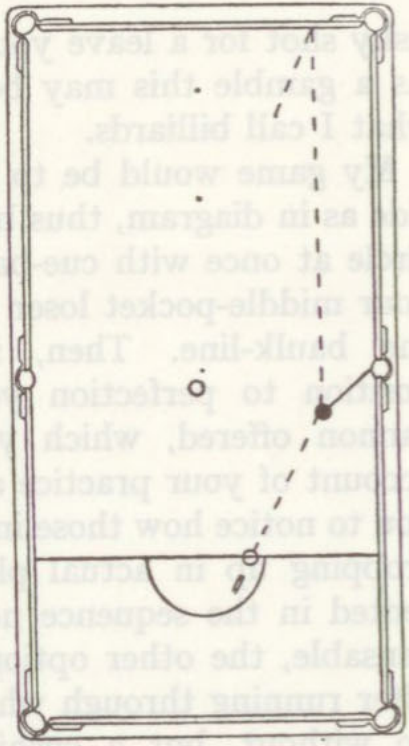
We see another instance in Diagram 44. Red, almost tight against the side cushion, about midway

between the middle pocket and the baulk-line, is the key to the situation, although a glance at the diagram shows that, with white where it is and cue-ball in hand, in-off white is the only possible shot to play. Quite so, but before you play it remember that if you score more than eight off white before leaving your cannon, you are playing indifferent billiards. It will be good practice if I leave you to work out your own shots to gain the cannon ideal within the limit of white losers you allow yourself. You will do this easily enough if you have a sound knowledge of my magic circle, as you will soon have a loser presented which has only to be played hard enough to bring it a little out of the circle towards baulk in order to leave the cannon you want. This may seem rather obvious, but it is wonderful the difference it makes to your breaks if you get the predictional habit so firmly in your mind that you have a fixed objective beyond one strike ahead. You do not always need it, there are innumerable positions where the next shot is all you want to envisage. But plenty of leaves present themselves where a more extended outlook is necessary.

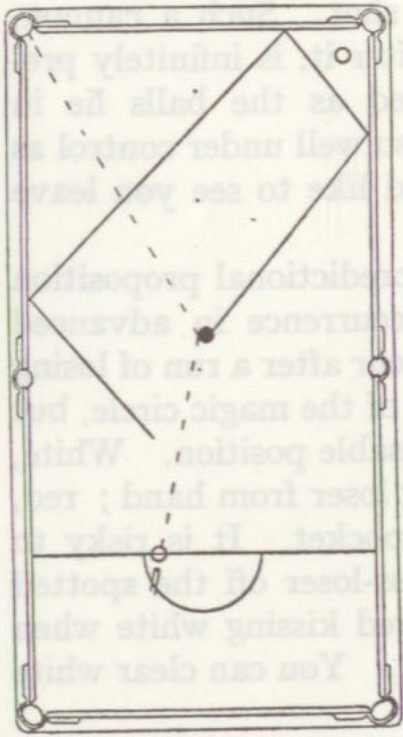
For example, after the general instance in Diagram 44, I show something giving you less latitude in Diagram 45. Here, red is in baulk, with white and cue-ball as shown. Of course, you can play a cushion-cannon offered, and may score it. Any twenty-break performer might do that, but he might miss such a cannon, and so might I. No amount of practice can make these shots absolute certainties in a scoring sense. Positionally they are problematical in the extreme; anything or nothing may be left after a cannon of the type we are discussing. Therefore attempting that cannon means you are chancing a



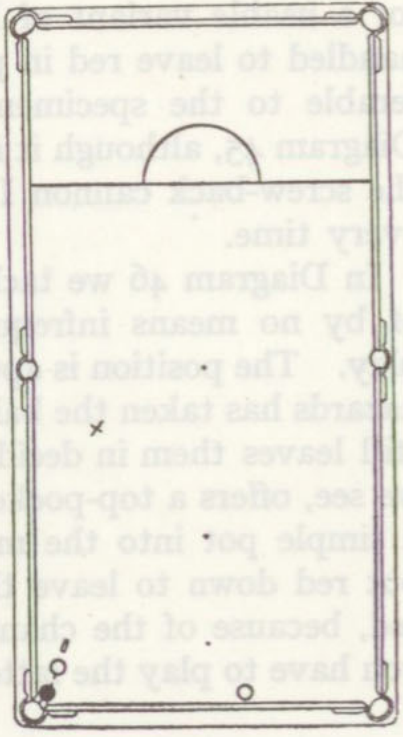
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46



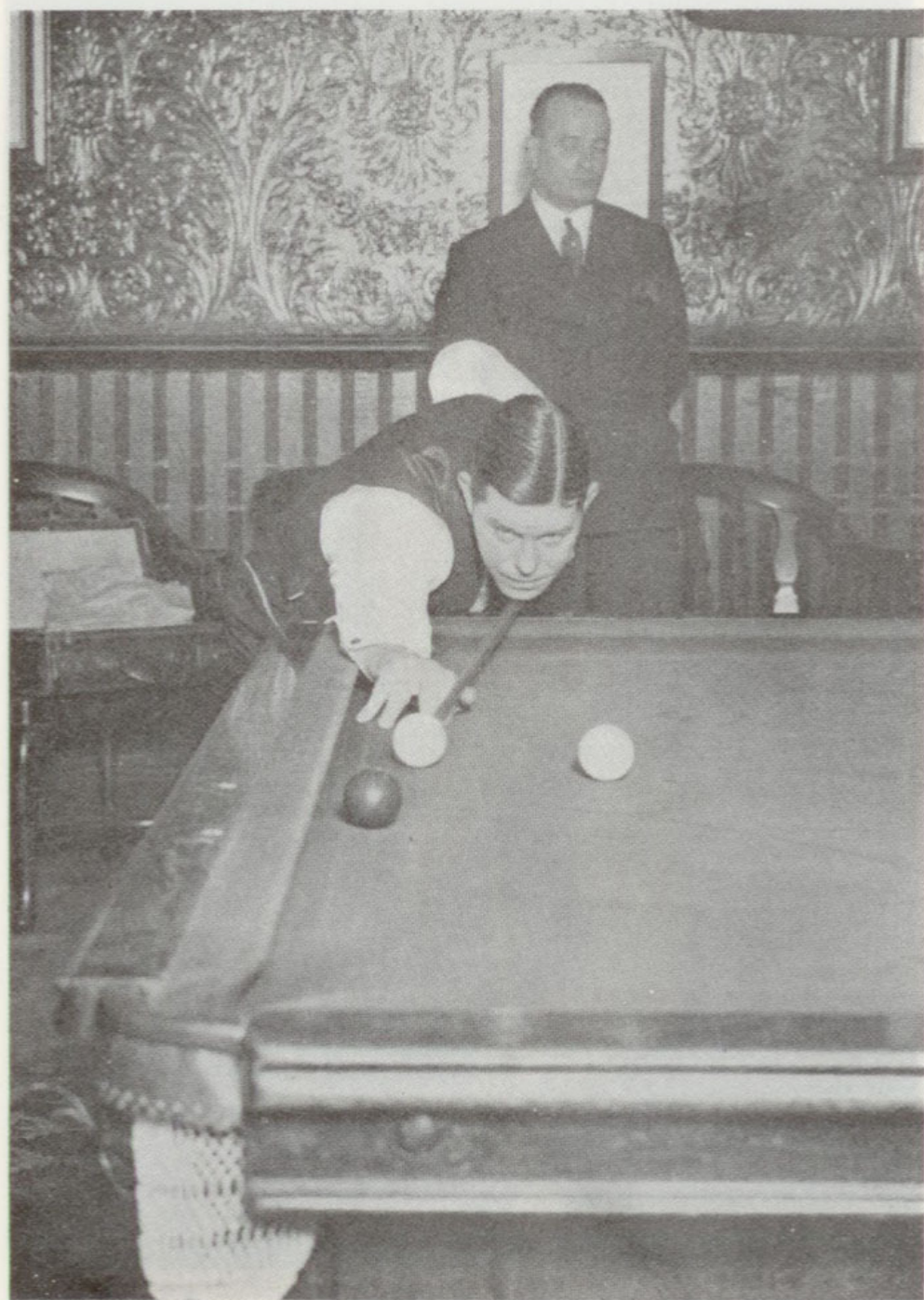
47



48



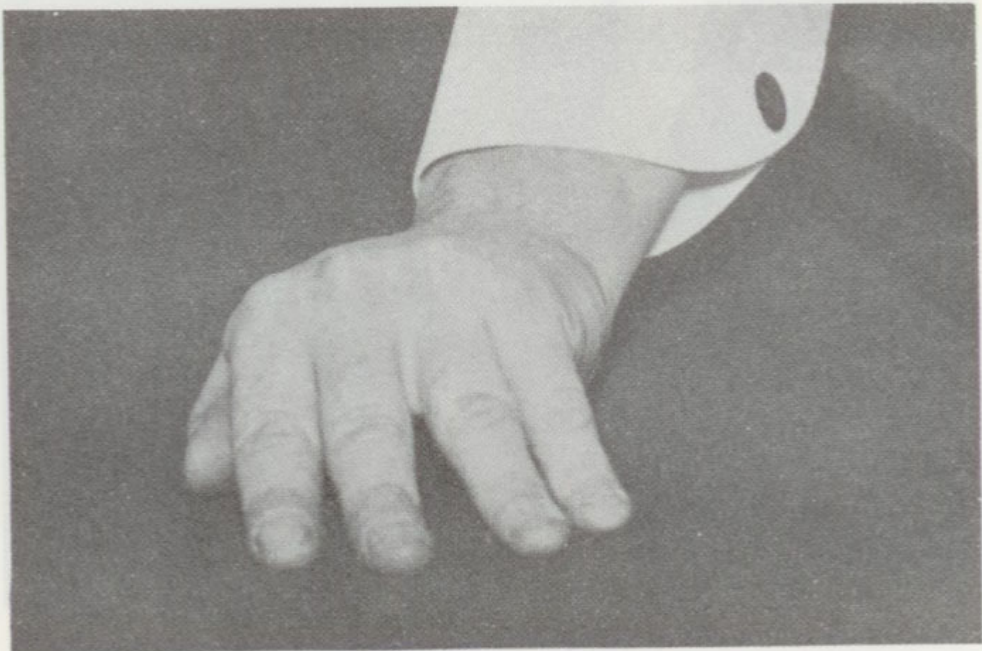
YANK BY MURKILL BRYLAW  
THE MASSE SHOT



WALTER LINDRUM IN PLAY



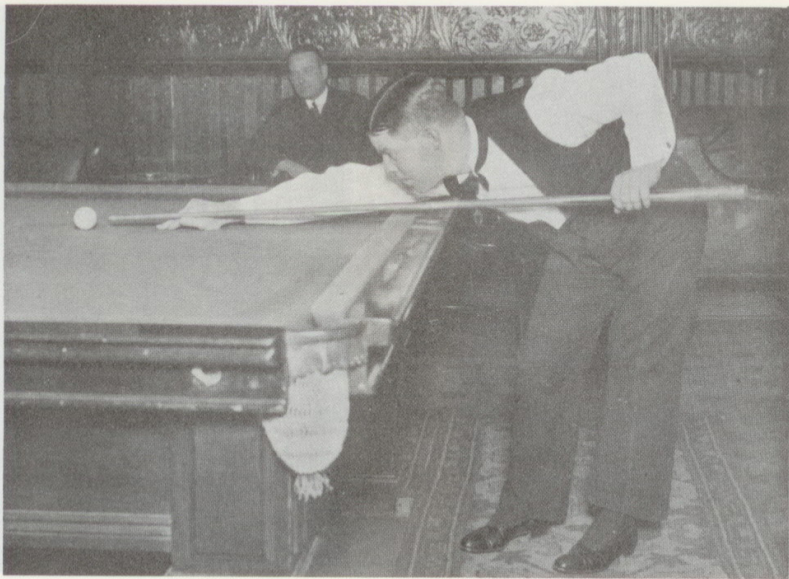
HOW TO MAKE A 'BRIDGE'—FIRST STAGE



HOW TO MAKE A 'BRIDGE'—SECOND STAGE

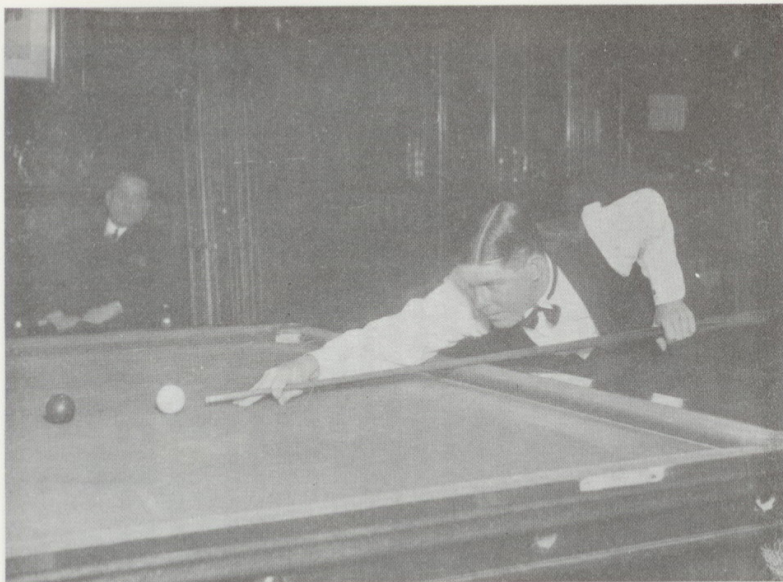
FIGURE 2. STANCE FOR THE LEFT HAND. HOW TO MAKE A 'BRIDGE'—FIRST STAGE





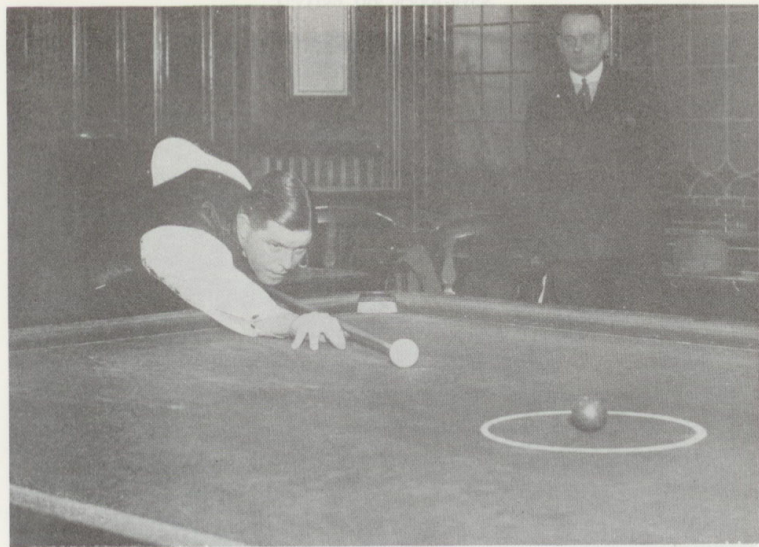
LINDRUM'S STANCE AND CUE HOLD FOR NORMAL BALL STRIKING

PLATE III

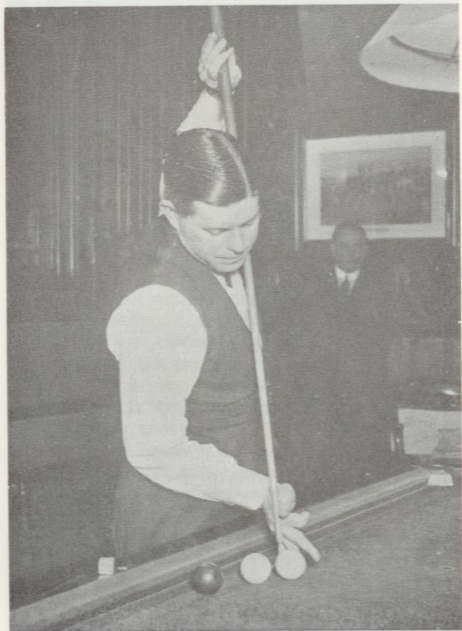


PLAYING THE SCREW-BACK  
(See Diagram 9)

PLATE IV

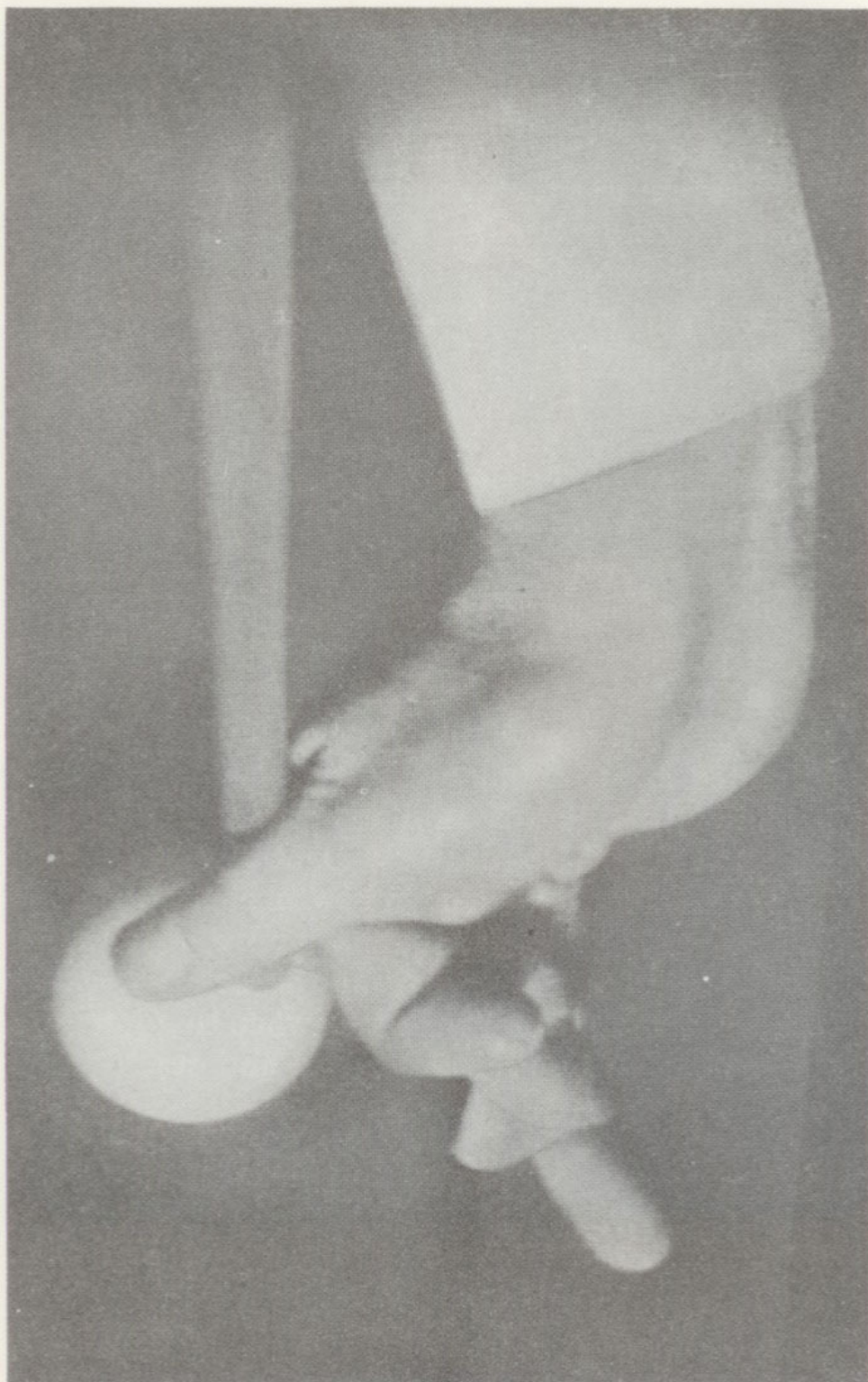


THE MAGIC CIRCLE



A MASSE CANNON

THEY WERE THE ONLY MASSE CANNONS IN THE WORLD



HITTING YOUR BALL FOR THE MASSE SHOT

have their positional possibilities. So, why pick the hardest shot of three? Billiards is not so easy that you can afford to be severe with yourself. By all means play the hard shot every time if that is the only one which offers position you can be sure about. But never do so when you have a choice of easier shots which can be played with scientific positional purpose. Over-refinement in the direction under discussion is a defect likely to do much harm to an amateur who plays a very good game. A player of this type is apt at times to treat actual scoring problems with less respect than they merit, with the result that he gets half of his shot, having the mortification of seeing the object-ball in perfect position (very probably leaving his opponent a splendid opening) while his ball just fails to achieve the decisive scoring half of his stroke.

But this is rather a digression from my chapter heading. It belongs more properly to stroke selection. My immediate object is to teach you to think in breaks rather than strokes, those little breaks, I mean, which clear up dubious position in a few shots. There is an enormous scope here for clear and correct thinking beforehand, as predictional play of this character is really called for every time the balls run a little out of perfect position, and is by no means uncalled for to keep them in perfect position.

The lesson I want to instil is that one stroke ahead is not far enough to see on many occasions. Amateurs have never been sufficiently impressed with the importance of this. That is why I have devoted a chapter to it.

## CHAPTER XIII

### STROKE SELECTION

**S**TROKE selection is a big and important subject. Sometimes there is too much on the table, as the saying goes, and you are apt to make a sorry mistake through playing the wrong shot, which makes you the more annoyed because the balls offered so much else you might have exploited to undeniable advantage. Diagram 47 displays a typical leave of this description.

With the cue-ball in hand the ball-to-ball cannon from red to white is as simple as can be. By spotting your ball farther to the left in the 'D', you score the cannon via the side cushion, with a possible chance of your ball entering the top pocket off white, thus making a five-shot of it. This is a reminder that the cushion first in-off white is offered if you like it and is quite a simple shot of its class. Finally, there is the long loser off red into the left top pocket.

Four different shots, you see, all distinctly feasible, from the position in Diagram 47. Which is the best shot to play? Many amateurs, I know, would answer this by playing the cannon at once, taking it off the side cushion; the direct cannon, with the obvious risk of losing white, would only tempt a most unsophisticated beginner. The trouble with the one-cushion cannon is that you cannot see the end of it at all clearly. Your ball may run into the pocket; it may stop covered by white for the red, a likely happening, because if you cannon on left of white you may lose it or endanger it.

The position of red after the cannon is also problematical. You know it should be somewhere in the direction of the left top pocket, and that you may get a feasible shot at it if you are not covered. All this makes the cannon the sort of shot which appeals to the player who likes to keep on scoring without due regard to position. He makes sure of his shot and takes an element of chance with the leave, a thing you want to avoid as much as you possibly can. The cushion first in-off white need not detain us. It is positionally vague, and the sort of shot always likely to be missed, particularly on a strange table, where you are not quite sure of the exact angle your ball will take from the cushion.

This brings us to the correct shot—the long, raking loser off red into the left top pocket. Not an easy one, but a clean half-ball shot does it every time, if you strike the cue-ball above its centre to send it well through red and away towards the pocket. The reason why I select this shot is because I should play it to leave in-off red as in the diagram. Then I should play a simple in-off to leave pot-red in the middle pocket. After playing this and running my ball to the head of the table, I can scarcely go wrong. I may be able to play in-off white at once, or after potting the red, and it is just possible that a very precise position might result which would give me an opportunity of cannoning and bringing the balls together for close work at the spot-end. But in any case I should be able to tackle the bad lie of white in the diagram very much better than is possible from hand, and should have scored at least six, perhaps nine, off the red before attacking white.

Diagram 48 presents a more elementary problem.

A six-shot is easy enough, and often tempts the inexperienced because of the obvious cannon that will be left after it. Yes, but that cannon, with white in the vicinity of the top cushion, needs most careful playing from baulk or you will leave nothing. Therefore why ask yourself to play such a shot when by just tapping red down and leaving the cross-loser you have a shot before you as easy in a positional sense as the cannon from hand is the contrary? As a matter of fact, it is seldom the game to play a six-shot. You do it when the white is approximately where indicated by the cross in the diagram, with a six-shot offered for preference into either top pocket. Then, of course, you continue with a drop-cannon from hand, this being one of the cases where you deliberately play to leave that type of cannon. When you do I hope you will remember my remarks about the extreme care the drop-cannon demands to play it and retain control of the balls.

Another problem in stroke selection is offered in Diagram 49. Here, the lie of the balls presents nothing at all tempting. You can score the right-hand top pocket off red with screw and powerful right-hand side, a shot which needs scoring, but is well within the game of plenty of amateurs. At the required strength, however, you cannot tell with any approach to certainty where red may stop. Should it stop to offer a plain ball-to-ball cannon, or a simple top-pocket hazard, all will be well, but if it happens to bring up awkwardly near the side cushion you will be left facing a complex-cannon. Consequently, you are taking a gamble with position if you play the red-loser.

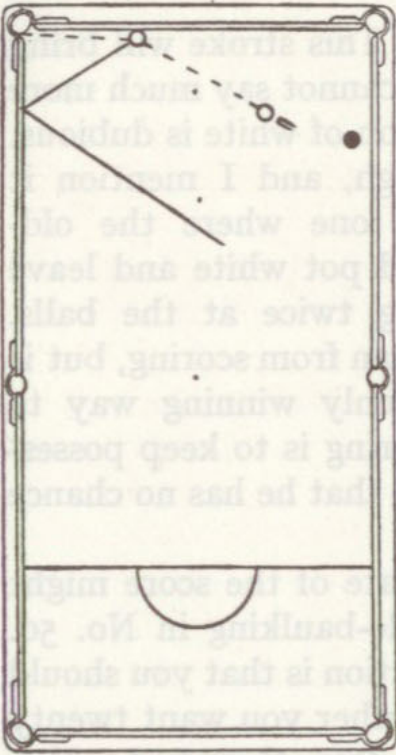
There is a one-cushion cannon playable—a thin



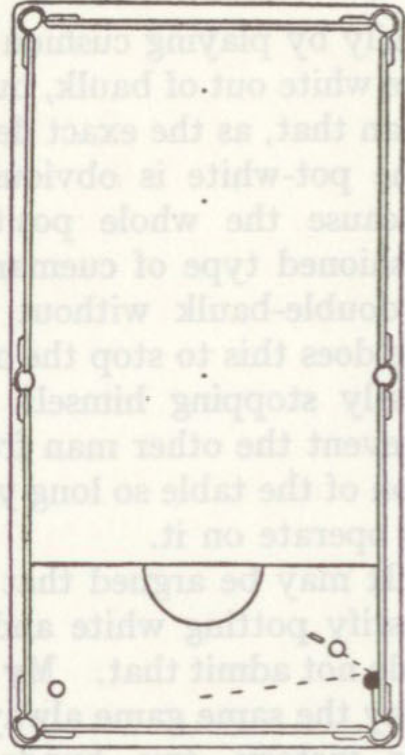
shot from the left of red back on white—and I suppose that in an executional sense this is the easiest thing offered by the lie of the balls. But as it is practically certain to finish badly on white, and cannot possibly improve the position of red, we need not consider it except as a shot to avoid. This leaves us with the run-through white into the left top pocket as the only remaining shot. Play it as in the diagram and your position is assured. You may leave another white-loser from hand or the cannon from white or red. That cannon is the leave you want, and if the loser presents itself, plan to play it for a cannon opening without wasting a stroke.

All three balls are shown in baulk in Diagram 50, and when this is the case stroke selection should invariably be concentrated on getting them out, all three of them, without losing any time. This may seem rather obvious advice, but I have noticed that too many amateurs are content if they can get the red out for a bout of red-ball play. This seems to satisfy them without caring much about leaving white in baulk more or less indefinitely, and I can only call this badly balanced billiards. The game is meant to be played with three balls, and the man who makes this his ideal will always beat the red-ball specialist, except in the case of an extremely good red-ball player being pitted against a relatively indifferent exponent of three-ball billiards.

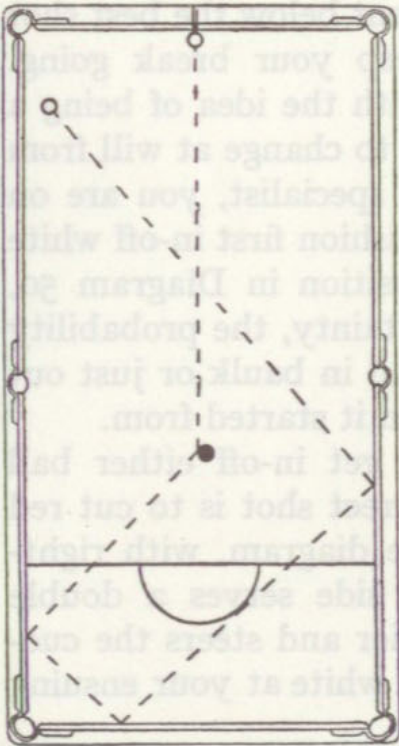
Regarding our diagram position, the leave in No. 50 demands careful consideration, and neat manipulation after you have considered it. The red ball is tight against the baulk cushion rather less than a foot from the baulk-pocket, with cue-ball and white as shown, the latter ball lying where you can get in-off it quite



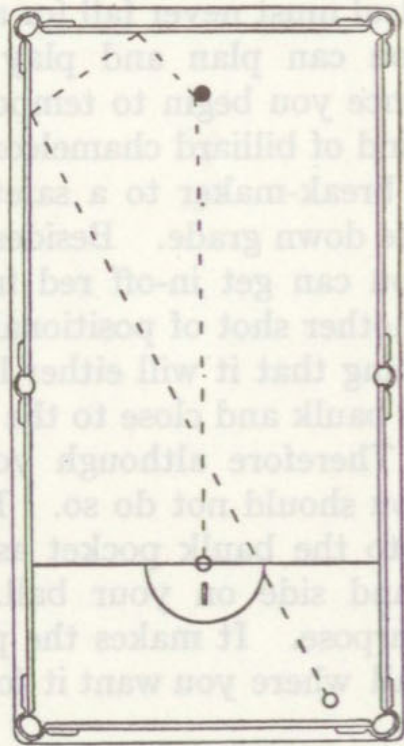
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51



52

easily by playing cushion first. This stroke will bring the white out of baulk, but you cannot say much more than that, as the exact destination of white is dubious. The pot-white is obvious enough, and I mention it because the whole position is one where the old-fashioned type of cueman would pot white and leave a double-baulk without looking twice at the balls. He does this to stop the other man from scoring, but is really stopping himself. The only winning way to prevent the other man from scoring is to keep possession of the table so long yourself that he has no chance to operate on it.

It may be argued that the state of the score might justify potting white and double-baulking in No. 50. I do not admit that. My contention is that you should play the same game always, whether you want twenty for victory, two hundred or two thousand. You cannot mix your billiards if you mean to excel. Your ideal must never fall for a moment below the best shot you can plan and play to keep your break going. Once you begin to temporize with the idea of being a kind of billiard chameleon, able to change at will from a break-maker to a safety-first specialist, you are on the down grade. Besides the cushion first in-off white you can get in-off red from position in Diagram 50, another shot of positional uncertainty, the probability being that it will either leave red in baulk or just out of baulk and close to the cushion it started from.

Therefore although you can get in-off either ball you should not do so. The correct shot is to cut red into the baulk pocket as in the diagram, with right-hand side on your ball. The side serves a double purpose. It makes the pot easier and steers the cue-ball where you want it for in-off white at your ensuing

shot. You must be careful about the effective range of this shot. It may prove expensive if you try it when the red is too far from the pocket for the cut winner to be a certainty. Work this out for yourself on the table. See how far you can trust the shot as regards the distance between red and the pocket. See what happens if red is not quite tight up. Experiment on the advisability or otherwise of playing the cannon to leave red when the winner is scarcely 'on' to your liking. Like this, Diagram 50 will introduce you to quite a series of useful strokes, and teach you much that will stand you in good stead in actual play.

Do not be content with scoring the first shot correctly. This proves that your judgment in stroke selection is sound and your execution capable. Carry on with it by making as big a break as you can. You have earned your position once more, proved yet again how my instructional methods are linked from first to last, and I want you to feel from break results that this is helping your billiards. It is my desire to make your progress as pleasant as possible, and there is nothing more enjoyable than putting a useful break together from a position which needs thinking about.

## CHAPTER XIV

### CANNON PLAY IN GENERAL

**T**HERE is always a chance of a cannon while there are three balls on the table.' What truth there is in this depends entirely on the simple fact that the ball on which you complete your cannon presents a target equalling the width of three balls, and may be appreciably larger if the second object-ball lies conveniently near a cushion. This makes the actual scoring of two points for a cannon easier than a pocket, but there is the tremendous positional difference that you have to control all three balls in cannon play. We saw what this meant in my previous remarks on drop-cannons, in which I emphasized the difficulty of keeping these shots under effective control for break-building.

All-round cushion cannons are much more elusive positionally than the drop-cannon. Sometimes, a multi-cushion cannon is presented of such difficulty that you are lucky to score it as best you can and take your chance of a leave. If you leave such strokes for yourself I fear this is a sure sign of lamentable weakness in ball-control, and can say at once that unless you are able to avoid entangling the balls in this manner your breaks will never be big enough to take you clear away from ordinary amateur class, and very ordinary at that.

I mention this to disabuse your mind of the idea that skill in playing all-round cannons of varied descriptions will permit you to take positional liberties, to become careless in your ball-control because you

think you can always score something to get you out of trouble. This will keep you in the ruck for ever, and the same is true if you include sundry other big shots in addition to all-round cannons of inordinate complexity. You may be uncommonly clever at this sort of stroke billiards, but the man who plays for position can afford to smile at your spectacular gymnastics, well knowing that he has the beating of you in hand every time.

Still, you need all sorts of shots at times to force openings for breaks. Apart from what may be left you by deliberate safety, there is the point that when your opponent fails through a bad shot that shot is likely to be bad both positionally and executionally, and consequently leave little or nothing. For instance, in Diagram 51 we see an example of the sort of thing always likely to be offered after a very poor stroke indeed. The general idea is that your opponent has pinned your ball against the top cushion, or very near it, as in the diagram, and has failed at a long loser off red into the top pocket, which he had to play through losing control of the red for winning hazards at the spot-end. His ball has bumped away from the jaw of the top pocket, the red has run round off three cushions for centre-pocket play from hand, and you are left with a very awkward shot indeed.

There is considerable temptation to give a safety miss here, but before you do this remember that you are presenting your opponent not only with the miss, but with every point you might have scored had you made the cannon as in No. 51, and got going with a break. In addition, you are making him a free gift of what he may get if he happens to break through your safety manœuvre. I know this is all problematical,

but it is an aspect of the probabilities seldom allowed sufficient weight. There is a tendency in amateur billiards to regard giving a miss as something you can do without much thought except to leave the balls as safe as you can. Naturally, you must give this every attention if you decide to give a miss, but the point I want to stress is that you should make very sure of what you are about before you relinquish possession of the table, a most valuable asset, by giving a miss.

In Diagram 51, for instance, where are you going to put your ball to leave your opponent an appreciably harder shot than the one before you? We will not analyse this; there is the possibility; work it out. This will show you that, after taking everything into account, the best thing you can do is to attempt the cannon as in the diagram. Play a bold, confident shot and you are always likely to succeed. It is a very good plan to practise this shot on a system. Try it a dozen times; note what you leave if you miss it. When you score, continue your break. Do this carefully and you will get the gist of my idea into your billiards. That is my way of teaching you—I want you to have that little note-book always handy—then you can look back and see how you are progressing.

Diagram 52 relates to another type of all-round cannon which repays careful attention. The first thing I want to tell you about it is that if you leave a cannon of this kind for yourself in the course of your break-building, then you had better concentrate for a time on the magic circle; there is something radically wrong with your ball-control in open play. Assuming it is left for you by an opponent, be careful not to hit the first ball so thick that it is liable to double back

into baulk and rob you of the cannon through your ball being kissed away just before reaching the second object-ball. A little side, left in diagram, duly allowed for when you spot your ball in the 'D', will assist in avoiding the kiss. Here, your ball being in hand, you have ample opportunity to do all that is necessary. When your ball is not in hand, you should still work on the general principle underlying Diagram 52, by keeping a wary eye on the possibility of the object-ball doubling back to spoil an all-round cannon. You eliminate this risk by using side on your ball and varying the contact with the first ball accordingly, a point worth memorizing.

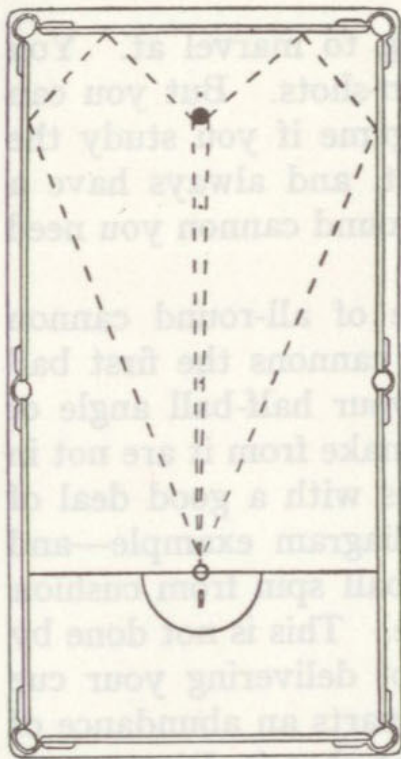
In cushion-cannon play, the plain half-ball contact has a peculiar attribute. This is the constant tendency the cue-ball has to return to the spot it started from. We see this indicated in Diagram 53, purely for demonstration purposes. If you place red about midway between the billiard and pyramid spots and your ball on the extreme right of the baulk line, and play a true half-ball on the right of red, your ball will return as indicated by the dotted line. Play precisely the same shot from the same spot to the left of red, and your ball will return to the same spot again, or pass over it. To do this exactly is a severe test of extreme accuracy in plain-ball striking and half-ball contact, and I do not suppose you will reach absolute precision in results when experimenting with No. 53. But you will soon see there is enough in it to be of distinct value in cushion cannon play.

It comes out to this. Wherever your ball may be, a half-ball shot, if played without side and at normal strength, must bring your ball back to its starting-point if the distance from the first ball to the nearest

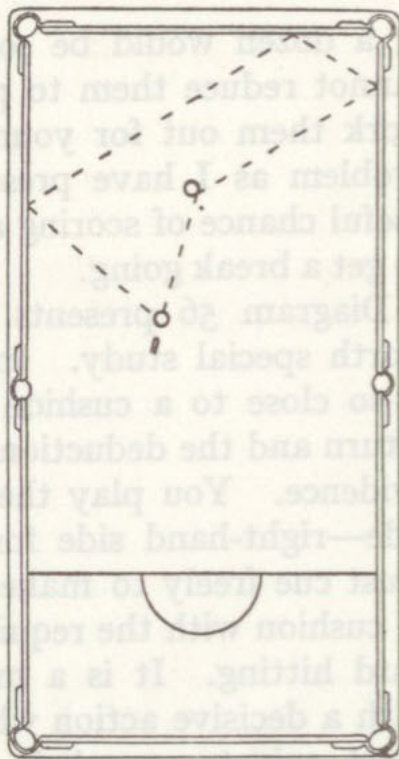


cushion is sufficient for the natural angle to operate on cushion contact. This is very valuable knowledge, because it follows that a second object-ball lying anywhere in the path your ball will take to return to its starting-point must present a certain cannon. We see the utility of this in Diagram 54. Here a plain half-ball shot on the right of white, played steadily and very accurately, will bring your ball back as indicated by the dotted line. Now, if you place red on its spot, as in Diagram 55, and play precisely the same shot as in 54, but more slowly, you score the effective positional cannon as shown—quite a good shot. This happens simply because red is in the way of your ball when travelling as it must after a plain half-ball shot. If you work ahead on the lines I have laid down, and satisfy yourself that the half-ball will bring your ball back as I have shown, then you have something which will be of constant assistance in your cushion-cannon play.

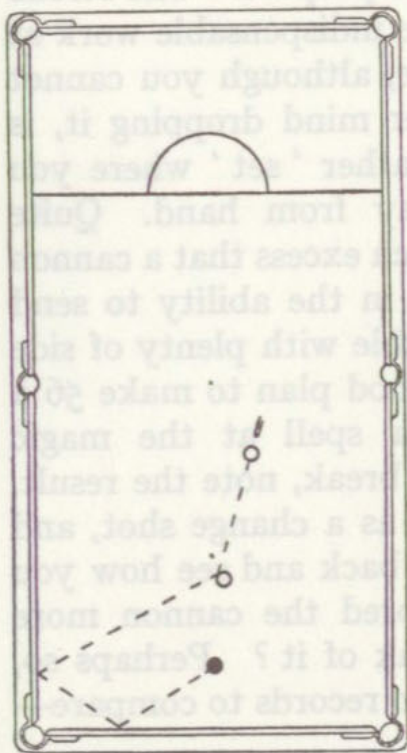
From what must happen when you play the half-ball you can compute the result of shots other than half-ball, or shots played with side. I know that this is generalizing very broadly, but all-round cannon play is a general subject. There are so many allied examples that you can keep on for months if you take shot after shot as a separate problem, merely changing the lie of the balls a little for the sake of what variety you can hope to infuse. Even then, in a scientific sense you have done little or nothing, because cannons off several cushions must always contain a larger element of chance than you see in the shots usual in your break-building. The force of this is at once evident if you try to imagine where you would be if you had to make a break of all-round cannons. A run of ten



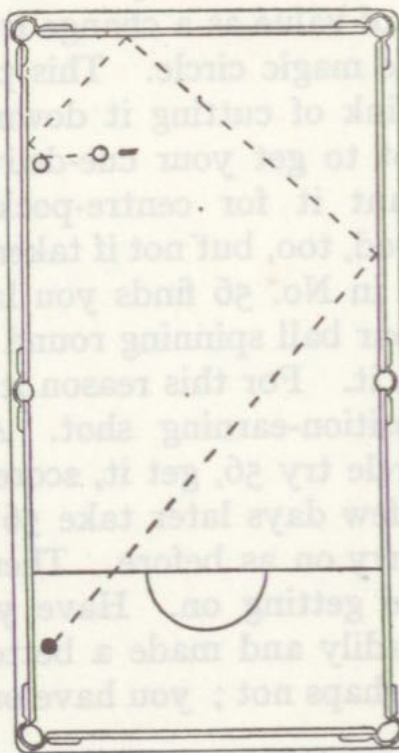
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56

or a dozen would be something to marvel at. You cannot reduce them to precision-shots. But you can work them out for your own game if you study the problem as I have presented it, and always have a useful chance of scoring an all-round cannon you need to get a break going.

Diagram 56 presents a type of all-round cannon worth special study. In these cannons the first ball is so close to a cushion that your half-ball angle of return and the deductions you make from it are not in evidence. You play these shots with a good deal of side—right-hand side for the diagram example—and must cue freely to make your ball spin from cushion to cushion with the requisite life. This is not done by hard hitting. It is a matter of delivering your cue with a decisive action which imparts an abundance of quick spin to your ball, and the shot in Diagram 56 is a good one to practise for this purpose. The stroke is of value as a change from the indispensable work at the magic circle. This practice, although you cannot think of cutting it down, never mind dropping it, is apt to get your cue-delivery rather 'set' where you want it for centre-pocket play from hand. Quite good, too, but not if taken to such excess that a cannon as in No. 56 finds you lacking in the ability to send your ball spinning round the table with plenty of side on it. For this reason it is a good plan to make 56 a position-earning shot. After a spell at the magic circle try 56, get it, score your break, note the result. a few days later take 56 again as a change shot, and carry on as before. Then look back and see how you are getting on. Have you scored the cannon more readily and made a better break of it? Perhaps so, perhaps not; you have only two records to compare—

insufficient data to be of use. But if you continue for six months or so you should have at least thirty records to compare. Then your little book will tell you a worth-while story: that is why I want you to keep it.

I DARE say that many of my readers will skip some of the preceding chapters in their haste to see what I have to say about nursery cannons, being animated to do so by the tradition that close-cannons are my favourite scoring method. This is a mistake. Without egotism, merely to place facts on record, I can say that, before I ever set foot on English soil I could make a thousand break at the spot-end without playing a run of close-cannons: a thousand break by all-round three-ball billiards consisting mainly of losing hazards from hand; and had taken the balls completely round the table in nursery-cannon play, steering them past both middle pockets. I and-ing with ability to do this, I varied my scoring methods at will, and still do so, utilizing close-cannons in due proportion to give variety to my break-building, but I am by no means dependent on them to make a thousand break.

What I really did with close-cannons was to give them their rightful place as a scoring force. Previously they were considered as a delicate refinement, full of subtle art and delf touches, but not to be relied on in the stress of fighting billiards. I may claim to have revolutionized this aspect of the game, and am indeed glad to have done so. Close-cannons are so interwoven into the fabric of English billiards that the elder Cook, the first cruetman to win the title of champion after playing for it, ran up a succession

## CHAPTER XV

### NURSERY CANNONS

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What I really did with close-cannons was to give them their rightful place as a scoring force. Previously they were considered as a delicate refinement, full of subtle art and deft touches; but not to be relied on in the stress of fighting billiards. I may claim to have revolutionized this aspect of the game, and am indeed glad to have done so. Close-cannons are so interwoven into the fabric of English billiards that the elder Cook, the first cueman to win the title of champion after playing for it, 'ran up a succession

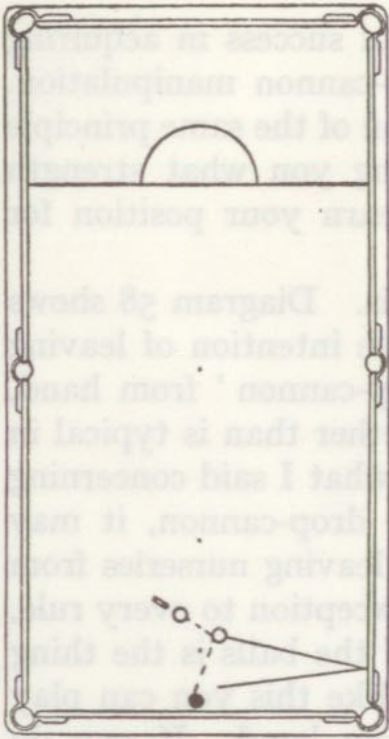
of cannons, breaking down at the seventh', in the early stages of the first championship ever contested. It may seem straining for effect to mention a run of seven cannons, but the game was only twelve hundred up, and the best break, by Cook, one of eighty, which contained 'pretty cannons'. In proportion, an eighty-break cueman who could tap off seven close-cannons in succession would about equal a thousand-break player capable of a run of eighty or ninety close-cannons. This shows that such play is our traditional game of billiards—it is nonsense to talk of close-cannon play as foreign to our tables.

In a break-building sense I do not regard close-cannons as indispensable as a scoring medium pure and simple, but for all that the man who can play them will always beat the man who cannot do so. The reason is simply because men are not machines. You get very tired of playing continual in-offs, or of scoring hundred after hundred by means of the alternative red-winner-cannon movement at the spot-end. Then a run of nurseries comes as a welcome change both to the man behind the cue and to the spectators, and is more of a relief to the player than is realized. In effect, I am almost playing three different games when I make my big breaks, switching from open billiards to the spot-end and alternating runs of nursery cannons. If I could not vary things in this way I am certain my four-figure breaks would be much less frequent than they are.

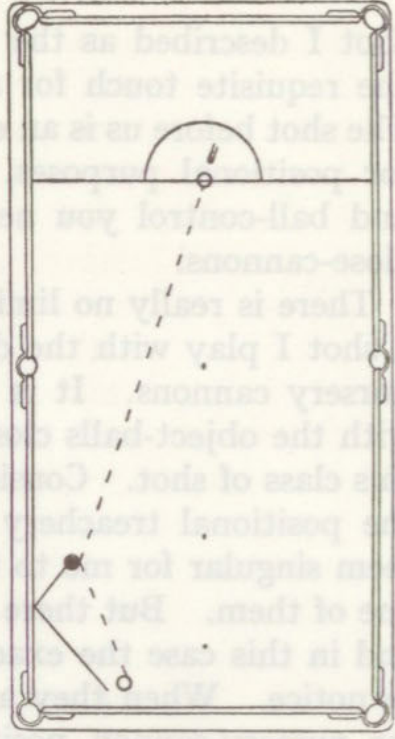
From this I want the amateur to learn that he must balance his game to distribute the strain of continuity of accuracy if he wishes to go ahead as he should. Close-cannon play will help more than he may think by giving fresh zest and variety to his break-building.

Coming to the cannons, the first thing is to leave position for them. It is all very well to arrange the balls in ideal close-cannon position, but you do not find them like that in actual play. As a matter of very hard fact, it is so difficult to leave the balls where you want them for nursery cannons that the task is often spoken of as too much to expect an amateur to master. I do not agree with this view, but I admit there is enough in it to make a full call on every atom of concentrated effort an amateur may possess. You can only succeed like this. Take any of the positions I am about to deal with, play as I describe to leave nursery cannons. To begin with, you may not do it once in fifty, then once in twenty-five, and so on until you regard it as welded into your normal game. This will take time, a deal of it, and much determination not to be beaten by the elusive run of the balls.

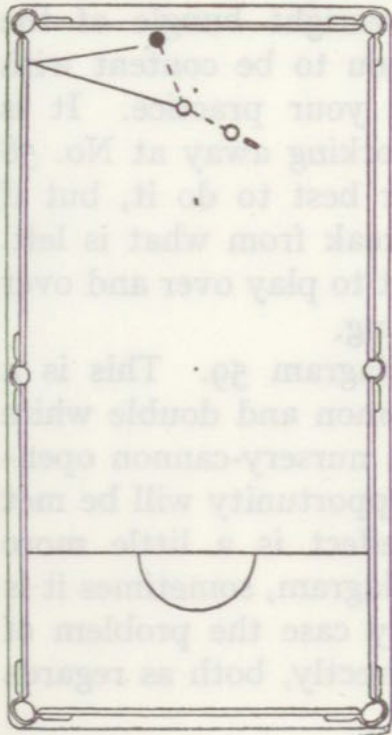
Begin by placing the balls as in Diagram 57, thus offering a simple cannon from white to red of a type frequently met with. Play it to leave nursery cannon position as indicated in the diagram. Very neat ball-control is essential here, especially in dropping just right on the second object-ball. I dare say you will soon discover how very easy it is to cannon too full on red and leave a cover of sorts. You are much more likely to fail positionally like this than by hitting red too thin on completing the cannon. Strength, naturally, must be controlled with the utmost exactitude. Only practice can give you an idea of what this means. It is quite useless to disguise the fact that unless you are prepared to school your touch to the work, a long and trying task, you will never make appreciable progress in any department of close-cannon play. You will remember that 'tap, tap, tap'



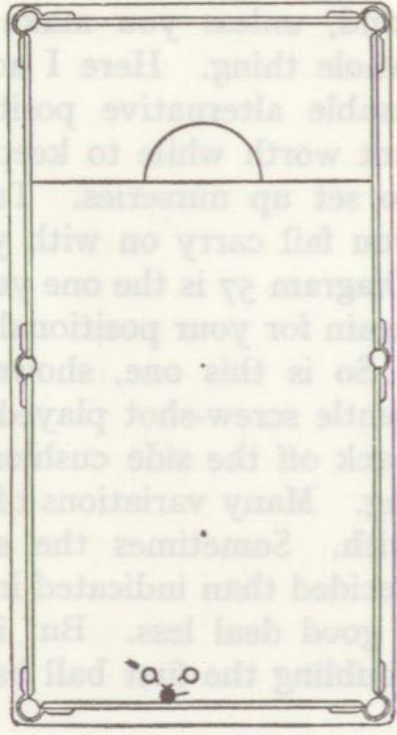
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shot I described as the secret of success in acquiring the requisite touch for nursery-cannon manipulation. The shot before us is an extension of the same principle for positional purposes, teaching you what strength and ball-control you need to earn your position for close-cannons.

There is really no limit to this. Diagram 58 shows a shot I play with the deliberate intention of leaving nursery cannons. It is a 'drop-cannon' from hand, with the object-balls closer together than is typical in this class of shot. Considering what I said concerning the positional treachery of the drop-cannon, it may seem singular for me to talk of leaving nurseries from one of them. But there is an exception to every rule, and in this case the exact lie of the balls is the thing to notice. When they are left like this you can play for nursery-cannon position from hand. If you do not get it you are sure to leave good position of another kind, unless you make a downright bungle of the whole thing. Here I advise you to be content with usable alternative position in your practice. It is not worth while to keep on working away at No. 58 to set up nurseries. Try your best to do it, but if you fail carry on with your break from what is left. Diagram 57 is the one you want to play over and over again for your positional coaching.

So is this one, shown in Diagram 59. This is a gentle screw-shot played to cannon and double white back off the side cushion for a nursery-cannon opening. Many variations of this opportunity will be met with. Sometimes the screw effect is a little more decided than indicated in the diagram, sometimes it is a good deal less. But in every case the problem of doubling the first ball back correctly, both as regards

strength and direction, is ever present on the same general lines, and so is the linked problem of dropping exactly right on the second object-ball. I advise you to spend plenty of time on the possibility suggested in Diagram 59. Taken in conjunction with 57 it will offer plenty of chances to get the balls bunched for close cannons, and is the more common opening of the two.

Having earned your position for nursery cannons—and I do hope you will do it before attempting to score them—I dare say you will soon find that you lose position with annoying rapidity through mistakes in strength. There is only one remedy for this—more and more of that ‘tap, tap, tap’ practice. I make no apology for continually mentioning this two-ball elementary shot, because I know very well that you will never play nursery cannons until you can ‘tap, tap, tap’ for minutes on end without losing control of the balls. This exercise-shot trains the delicate muscles of your cue-hand and arm to be instantly responsive to the requirements of close-cannon play. It is a thing apart in billiards. The cue-control indispensable for gaining nursery-cannon position is too heavy and pronounced for retaining that position. You need that different sense of touch and cue-mastery which ‘tap, tap, tap’ gives, and it must be so much second nature to you that you fall into it without conscious effort immediately after making the relatively robust shot which has left the balls available for nursery cannons.

Having taught you the way to tap into touch for nursery cannons, and how to leave position for them, I will pass to the influence of side in nursery-cannon play. Obviously, after contact it must take the

cue-ball in the direction of the side imparted. Before ball-to-ball contact is established the distance between cue-ball and first object-ball is too short in close-cannon play for deviation due to side to affect the run of your ball. That is, when you play with a level-swung cue. If you begin to raise the butt of your cue when imparting side you have not far to go before swerve, the embryo of the masse, may make a difference, a point you want to take into account.

The characteristic effect of side in nursery-cannon play is seen in its influence on the direction of the first object-ball. This is very clear in Diagram 60. If you put right-hand side on your ball here and hit the first object-ball fairly full your ball will take the other along with it. But if you play with left side your ball will leave the object-ball almost where it is. This demonstrates a point in constant demand in nursery-cannon play, where the power of side in keeping the object-ball where you need it is something you must have at your knowledgeable disposal or you will soon find the balls beating you hopelessly. I might set up dozens of cannons to prove this, and would do so if I did not know that you will progress more rapidly if you work out what Diagram 60 explains as a general principle and apply it to individual shots as they occur.

Take your time over this while you are learning. It is very deceptive to watch an expert playing nursery cannons with such rapidity that the marker has to gabble his words to keep pace with the scoring. That is the ideal to aim at, as these shots can and should be played quickly when you are even reasonably adept. But while you are in the throes of your preliminary work it will often pay you to pause and look at a little

cannon as long and thoughtfully as you might at a cannon off several cushions on which a great deal depended. Remember that effortless and rapid execution is your goal and reward, and that you cannot expect to reach it at your first attempt.

As you do this you are learning one of the most important things connected with close-cannon building, which is to score as many cannons as you can while taking the balls along a given length of cushion space. The shot in Diagram 61 is invaluable for this, as the kiss effect pins the first object-ball in much the position in Diagram 61 without changing the position at the number of cannons you can make from the of 'tap, tap, tap' exercise you will soon be surprised shot to play over again. If you have done enough second ball without moving it, when you have the same ball. You want to get as near as you can to hitting the scored by a mere brushing contact with the second the ball you have 'tapped' so often, the cannon is carefully so that, as your ball kisses back gently from 61 shows where you should place it. Adjust it very want you to put a third ball on the table, and Diagram 'tap, tap, leave. But now, for the first time, I The playing stage takes you back yet again to the your cue except by accident?

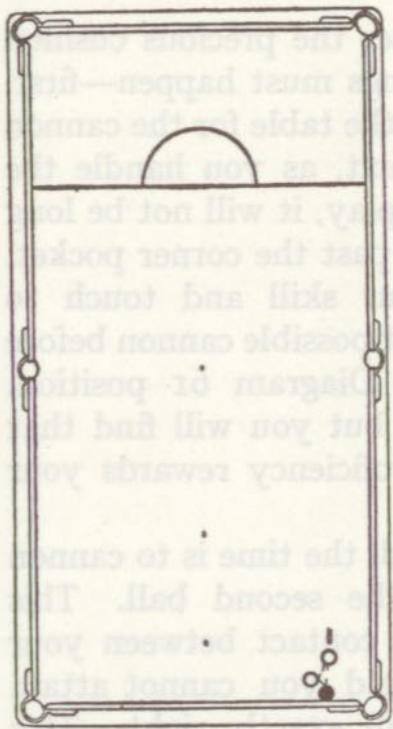
## CHAPTER XVI

### NURSERY CANNONS (*Continued*)

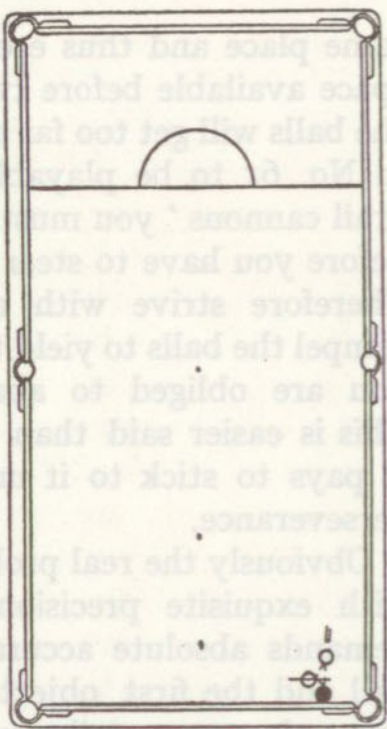
**A**FTER you have gained some idea of how to leave the balls for close-cannons you can concentrate on their manipulation. This is a reversal of the usual process, but I regard it as very necessary. What is the use of placing the balls by hand where you are never likely to leave them with your cue except by accident ?

The playing stage takes you back yet again to the 'tap, tap, tap' leave. But now, for the first time, I want you to put a third ball on the table, and Diagram 61 shows where you should place it. Adjust it very carefully so that, as your ball kisses back gently from the ball you have 'tapped' so often, the cannon is scored by a mere brushing contact with the second ball. You want to get as near as you can to hitting the second ball without moving it, when you have the same shot to play over again. If you have done enough of 'tap, tap, tap' exercise you will soon be surprised at the number of cannons you can make from the position in Diagram 61 without changing the position of the balls sufficiently to compel another type of close-cannon to be played.

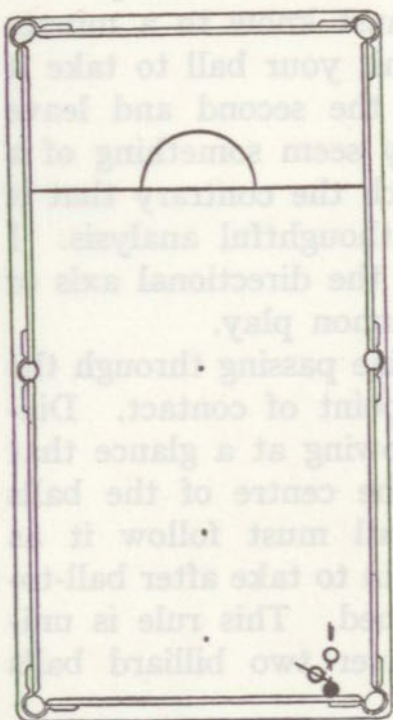
As you do this you are learning one of the most important things connected with close-cannon break-building, which is to score as many cannons as you can while taking the balls along a given length of cushion space. The shot in Diagram 61 is invaluable for this, as the kiss effect pins the first object-ball in much the



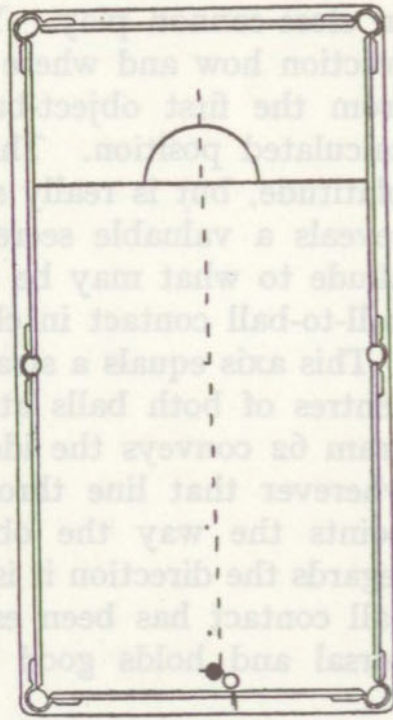
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64

same place and thus economizes the precious cushion space available before two things must happen—first, the balls will get too far across the table for the cannon in No. 61 to be playable. Next, as you handle the 'rail cannons' you must then play, it will not be long before you have to steer them past the corner pocket. Therefore strive with all your skill and touch to compel the balls to yield the last possible cannon before you are obliged to abandon Diagram 61 position. This is easier said than done, but you will find that it pays to stick to it until proficiency rewards your perseverance.

Obviously the real problem all the time is to cannon with exquisite precision on the second ball. This demands absolute accuracy in contact between your ball and the first object-ball and you cannot attain this unless you strike your ball exactly right. This executional link between all three balls is ever present in close-cannon play. You must know to a minute fraction how and where you hit your ball to take it from the first object-ball to the second and leave calculated position. This may seem something of a platitude, but is really so much the contrary that it reveals a valuable secret on thoughtful analysis. I allude to what may be called the directional axis of ball-to-ball contact in close-cannon play.

This axis equals a straight line passing through the centres of both balls at the point of contact. Diagram 62 conveys the idea, showing at a glance that wherever that line through the centre of the balls points the way the object-ball must follow it as regards the direction it is certain to take after ball-to-ball contact has been established. This rule is universal and holds good whenever two billiard balls

strike each other. In our constant reference to half-ball, quarter-ball, and other contacts we are apt to forget the elementary fact that it is impossible for two spheres to meet except at one tiny point. There is no particular significance in this in a playing sense when the balls present targets at long or medium ranges, as they do in open billiards. But when you get all three balls under your cue-tip for close-cannon manipulation, then you can calculate exactly the supreme influence of the directional line passing through the centres of both balls at the moment of contact. In effect it reduces every problem of ball movement to a straight line. In Diagram 62 we see the line for the brushing contact needed to play Cannon 63 to perfection. If you hit the second object-ball a shade too thick you get the position indicated in Diagram 63, as the inevitable result of your variation in ball-to-ball contact having created a fresh directional line. The cue-ball is shown twice in Diagrams 62 and 63, once at the point of contact to illustrate the directional line, and again where it stops. It is very helpful in close-cannon manipulation to acquire the habit of computing this directional line, as it tends to make a known and fixed rule in the place of more or less hazy approximation.

Having left the balls as in No. 63, you have obviously veered badly off the ideal line. You can no longer continue with that 'tap, tap, tap' movement so prolific in Diagram 61. This emphasizes a point I cannot stress too strongly, which is that you have a relative immensity of ball circumference on which to score any close-cannon, but only a thin straight line of directional axis on which position is continually revolving. Positionally, nursery cannons cut the



permissible margin of error to zero. The least deviation from that unswerving line of directional axis and you must either change your whole scheme of manipulation or abandon nursery cannons for the time being. Manipulative change is called for in No. 63. You cannot continue by kissing your ball back, but must play a direct cannon from ball to ball, as in the diagram. Here you must avoid cannoning too fine on the second object-ball. I do not want you to get behind it any more than can be helped, as the length of your run of cannons must depend very materially on your ability to keep that ball pinned against the cushion, or very near it.

After the cannon in No. 63, however, your next shot, although a kiss effect, must move the ball near the cushion a very little. The vital thing here is to complete the cannon as indicated with the minimum disturbance of both balls. A deft touch will do it every time, and that is all I can tell you in addition to what I have already demonstrated. By now, if you have followed my instructions, you should have that touch at your finger-ends, with the directional line to guide your positional calculations. But you will get nowhere at all if you merely read my words, put the balls on the table, and have a try just to see how you get on for half an hour or so. This will prove true even if you have made plenty of hundred breaks by open billiards. You are now passing through quite another phase of the game, and must work upward and onward from its beginning, which is hours and hours of 'tap, tap, tap' to get that automatic command of the indispensable touch.

Once you get the fundamentals so mastered that they become second nature the rest is relatively easy.

Given touch and a sense of the directional line you must go ahead. Without them you are completely helpless and hopeless. No man can tell in print or depict in diagram the infinite variation presented by close-cannons, which look much about the same even to the semi-trained eye, never mind that of the absolute beginner at close-cannon manipulation. You must cope with these variations by relying on your own touch and judgment, by learning from countless failures, and never giving up until you are satisfied with results. At first this is a slow and laborious process. You face your shot, predict where the directional line will run for position, play your best, and fail more or less lamentably. Then, do not be satisfied with 'something else'. Replace the balls very carefully and think out why you did not reach the ideal you had in mind. Then try again and again and again, until you are on top of your job. Like this your strenuous struggling will lead you to that sense of mastery which does everything by means of a quick tap which seems almost careless. But you cannot get that quick-tap style without working very hard indeed, take my word for it.

Watch very carefully indeed every tiny indication of variation in cannon presentation. These are sure to occur, or repetition cannon-play would be your reward and doom. The thing you want to remember is that variation in leaves is amenable to break-building if tackled when so small that it may be the next thing to imperceptible. But it is so rapidly and decisively cumulative in effect that one poor shot may easily take you from usable position to the end of all possibility of continuing with close-cannons. Very likely it may stop you from scoring at all, as a cover

may be left calling for a masse you may find too much for you. This proves that you can never afford to relax for a second when playing nursery cannons, simple as they look. A slight mistake becomes a fatal error in no time unless you are warily watchful of every shot you play.

Faced by such an inexorable demand for absolute precision it is no use trying unless balls, cloth, and cushion can be depended on. A good set of crystal-ates will respond to every requirement of nursery-cannon play, but you cannot manipulate them if the cloth is worn or pitted or the cushion dead or imperfectly responsive. Then all sorts of queer antics will be played by the balls, which simply proves that they are true while cloth and cushions are at fault. I mention this to prevent you from working hard with the conditions so much against you that success is out of the question. Do not be in too much of a hurry to blame balls, cushion, or cloth. But if you see the balls rocking and settling down gently in little pits in the cloth, then you can only give it up and play open billiards as well as you can until the conditions receive a much-needed improvement.

## CHAPTER XVII

## SAFETY PLAY

**S**AFETY play, in the old-style sense of the term, never enters into the normal conception of my game of billiards. As an exception, yes, I utilize it, but the exception is so decided that in the ordinary way I should expect to score many thousands of points without giving safety a thought. Mainly, of course, this is because when I get the balls under control I keep them there, but even when the balls run difficult I do not consider safety until I have thoroughly satisfied myself there is nothing else worth playing for. The scoring opportunity, even if relatively remote, is always uppermost in my mind, and I advise you to cultivate that habit of thought whenever there is a possible chance of scoring according to your estimate of the position.

When this is the case you may be certain that it will pay you to try to score every time. But not unless you dismiss all thought of safety from your mind, and go for your hard shot with as much confidence as if it was the simplest shot you could wish to see. Half-hearted play is bad at any time, but worst of all when you want a big shot to score and are facing your job with a feeling that a safety shot might be better. Therefore never get caught in two minds about playing for safety, and when you are quite satisfied that it is the only thing to do, play your safety shot with as much care as if it was the critical shot in a big break.

Remember that a careless safety shot is apt to be tremendously expensive. For instance, in Diagram 64 we see red just clear of the top cushion, cue-ball touching the cushion and within a fraction of an inch of the red. The white is lost, and on the lie of the two balls left to play with it is obviously hopeless to try to keep on scoring. Now, if you give a miss in baulk you play a very bad shot. The correct shot is to just shave red with a mere brushing glide in passing and leave your ball in baulk, as in diagram. There is a good deal more in this than merely saving the single point for the miss. It gives you the 'turn of miss' in your favour under the rule limiting consecutive misses, a matter of great importance in safety play.

It works out like this. Suppose you gave a miss in baulk as offered in Diagram 64 your opponent would at once run a coup and leave you compelled to hit that red ball, unless you preferred to allow him a shot at the spotted balls as a penalty award. In either case he would have altogether the best of it. You cut all this out by hitting red as I advise, as if he gives a miss in reply you can run the coup if it is to your advantage to do so and leave him with only the red to play at. Whenever you think about giving a miss, always calculate beforehand what the result of a coup in reply will be. This will nearly always induce you to play on a ball for safety, but there are exceptions when you can leave your ball commanding red after a miss and thus put your opponent in an awkward quandary.

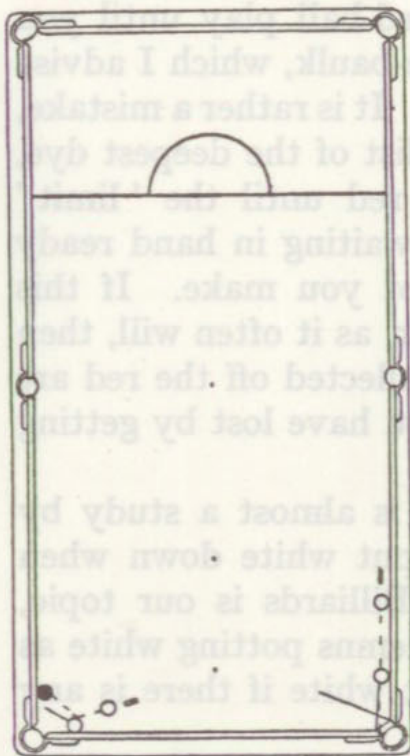
Diagram 65 shows a case of this sort. White is almost touching the middle of the baulk cushion. Red may be tight up or nearly so against the top cushion as in diagram. Your ball is a little below the billiard



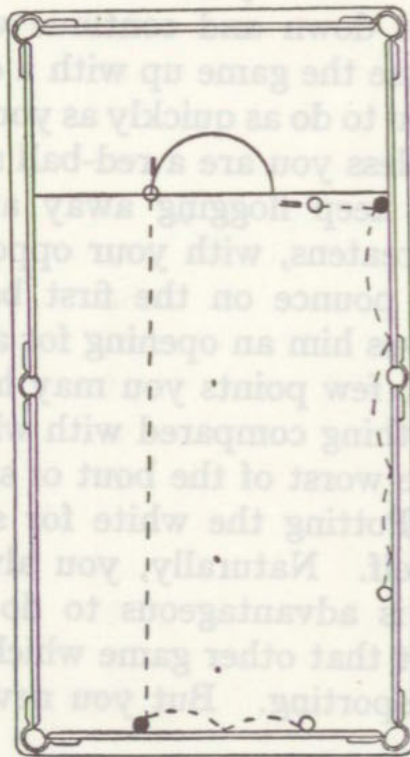
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