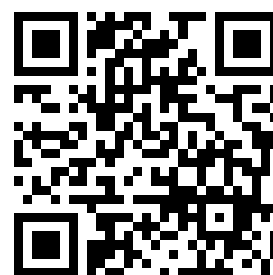

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THE
GAME OF BILLIARDS:

SCIENTIFICALLY EXPLAINED, AND PRACTICALLY SET FORTH,

IN A SERIES OF

NOVEL AND EXTRAORDINARY, BUT EQUALLY PRACTICAL, STROKES;

AND

ILLUSTRATED BY NUMEROUS APPROPRIATE DIAGRAMS.

TO WHICH IS ADDED

THE RULES AND REGULATIONS

WHICH GOVERN THE

NUMEROUS GAMES AS THEY ARE PLAYED AT THE PRESENT DAY

In all the Countries of Europe.

BY EDWIN KENTFIELD,
OF BRIGHTON.

"LET US TO BILLIARDS."

SHAKESPEARE.

FIFTH EDITION.

LONDON:

PUBLISHED BY THE PROPRIETOR, JOHN THURSTON,
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THE PROPRIETOR'S ADDRESS.

THE GAME OF BILLIARDS has some general claims upon the attention and patronage of the public, which it becomes the proprietor of this Treatise humbly to advocate and explain. It affords a recreation, which, with the exception of Chess, is the only one usually (would that it were invariably so), played FOR ITS OWN SAKE, and not for the pecuniary gains it may afford. It is the triumph of skill; and the player should never seek any other reward for his victory. It thus becomes a recreation of the mind, in its purest sense; relieving those whom the fatigue and anxieties of a life of business may have harassed or exhausted, by the introduction of a new train of ideas, of a gently exciting, but highly pleasurable nature. The overstrained bow will break, and the overtasked powers of the most gigantic mind, to whatever branch of science or literature those powers may be applied, must sooner or later, sink under the unmitigated pressure of continued application. Hence, in all countries, and in all times, statesmen, scholars, and divines, no less than men of fashion or of business, have indulged themselves by some mode of relaxation most congenial to their taste, or readiest to their reach; and, when practicable, made it an integral part of their every-day economy.

It is scarcely necessary to enumerate the almost endless catalogue of diversions to which mankind have thus betaken themselves;—some in their nature harmless;—others, of doubtful character:—but many, it is to be feared, positively injurious, or at least, frivolous and unmanly. Suffice it to say, that Billiards, both as a mental and physical exercise stands foremost in the class of unexceptionable amusements, and that many of the best and wisest men have selected that noble game, as affording at once the most innocent, rational, and exhilarating relief from the severity of studies which otherwise would prove exhausting to the spirits, and destructive of the vital system. By thus rendering bodily exercise, or temperate and rational recreation subservient to the higher purposes of life, by giving, as it were, a proper direction to means that are to accomplish great ends, not only is the animal body maintained in vigour, but the mind is so refreshed and revived, as to be enabled more readily and successfully to grapple with the loftier objects of its pursuit.

Again. The pleasure which results from Billiard-playing cannot, as in the case of chess, be said to partake of a selfish character. Chess is a solitary and a silent game. It is, indeed, the mathematics of the mind—the encounter of two master spirits—but it calls forth neither the muscular energy of the one, nor the physical prowess of the other; and a mere looker-on, unless a very skilful player, can take but little interest in a game of an indefinite and often of a protracted duration; or in the progress of moves which he can seldom foresee or understand; and which if foreseen, can be easily counteracted: whereas, in Billiards, the spectator will soon become as much engaged as the player, and a general interest will thus spring from a source unpolluted

by any of those degrading passions which games of chance too often engender.

Nor is the health of the body, which the exercise of Billiards is so well calculated to promote, to be slightly regarded. Upon an average, a player while thus engaged will walk between two and three miles an hour, to say nothing of the numerous muscles which will, in turn, be called into action, but never be allowed to remain long on the stretch, since the attitude is constantly changing, and every member is successively and alternately put in motion. For such reason it is, that Physicians consider Billiards, in point of salubrity, as preferable to every other species of in-door exercise ; for, while it affords healthful action, not partially, but generally, to the animal frame, it imparts to the mind a gentle exhilaration, which sustains, without exhausting, the vital powers. Where it necessary to support the views thus offered, the testimonies of some of the most eminent of the medical faculty might be adduced. The Billiard Table has indeed of late become one of the instruments of cure in establishments for the recovery of patients mentally affected ; amongst which may be enumerated those of Doctors Sutherland and Warburton, of London ; and Fox of Bristol ; and the game has been as strongly recommended by Doctor Paris, of London ; and by other Physicians equally eminent for the cure of diseases affecting the health of the body.

Having thus briefly, but he trusts with all plainness and honesty, recorded his conviction of an amusement, censured he is aware by some, and unappreciated or misunderstood by others—a conviction not hastily arrived at, but one which is the result of many years reflection and experience—the proprietor

of the following Treatise must be allowed, in conclusion, to congratulate the lovers of Billiards, upon the appearance of a work, in the production of which he has spared neither labour nor expence; and which, as compared with publications of a similar kind, he has no hesitation in pronouncing unrivalled for its utility and completeness; and in point of originality and research, without a parallel. ♣

JOHN THURSTON.

14, *Catherine Street, London,*
September, 1839.

THE AUTHOR'S PREFACE.



It will be readily perceived by those conversant with the Game of Billiards, that the chief object of this work is to afford instruction to beginners, and to such as have acquired but a moderate and limited knowledge of the Game. Fully aware that the same ground has been repeatedly trodden by others, I should have felt some reluctance in submitting this treatise to the notice of the public, had I not felt convinced that all the works published on Billiards, twenty or thirty years ago, are now become comparatively useless, in consequence of the many alterations and improvements that have been successively introduced, and which have so greatly contributed to the state of perfection to which this noble amusement has at length arrived. The strokes described and explained in publications of a later date, (although it must be admitted that they are well calculated to astonish and amuse the uninitiated spectator), are, with few exceptions, open to one great objection: they are deficient in practical utility; since the curves and angles formed by the ball are at variance with our pre-conceived notions of a round ball rolling upon a level surface. An amateur, possessed only of moderate skill, may practise these strange feats at his own table, till he spoil his cloth, before he succeeds in performing one of them; but the directions here given are not intended to teach the player how to exhibit mere tricks, or fanciful strokes, or those feats of skilful address which it were a folly to attempt; on the contrary, the object of this work is to convey a sound systematic knowledge,

founded on correct and established scientific principles, and elucidated by intelligible diagrams. For this purpose, I have selected such strokes as appeared to me best calculated to convey instruction, and to lead to practical results; and I have endeavoured to compress the explanation of them into the following treatise, which I now commend to the lovers of Billiards, in the hope that it may contribute to their initiation and advancement in that noble Game; and trusting, at the same time, that the information which it contains, and which is the result of my own practical experience for a series of years, as well as of my observations amongst the highest circle of amateurs, will not prove altogether unacceptable to those who have passed their novitiate.

EDWIN KENTFIELD.

Brighton, June, 1839.

BILLIARDS.

BILLIARDS is a game of amusement which may lay claim to some antiquity, if any inference can be drawn from Shakspeare,* who makes Cleopatra exclaim, "Let us to Billiards."† Now, unless we accuse our great dramatic poet of a gross anachronism, the game must at least be as old as the battle of Actium, which was fought 31 years B.C. At all events, we may conclude that Billiards was in his time regarded as of ancient origin. The first table we hear of in Europe was introduced into France, about the year 1580, which was only 28 years before the play of Anthony and Cleopatra was written, but it is most probable that the game was introduced into Europe long before that period.

It may, perhaps, appear extraordinary that this game should, for such a number of years, having been played without receiving the least improvement, it being only within the last fifty years, that any suggestion for rendering it more perfect has been advanced. This, however, will cease to be a matter of wonder, when it is known, that the game was usually played with the mace, or with cues that were perfectly flat at the point, and sometimes tipped with ivory, so that a central stroke alone could be accomplished; so long, therefore, as the ball could be struck only in the centre, improvement could not be expected. About fifty years ago, it was discovered, that if a cue were cut obliquely at the point, or rounded a little on one side, so as to present a broader surface to the ball, it might be struck below the centre, and this strange instrument was then adopted for occasional strokes, and obtained

* Anthony and Cleopatra; Act ii. Scene 5.

† This was probably a kind of Fortification Billiards.

the name of JEFFERY. About the close of the last century, it was ascertained, that if the point of the cue were rounded, much advantage would be gained by increasing its striking surface. A few years after this, (somewhere about the year 1807), the leather point was introduced, since which period the game may be said to have gradually become more accomplished.

The introduction of the RED Ball is of recent date. Formerly, the game was played with two WHITE balls only, and the sole object of the player was to pocket the ball of his adversary, and keep his own OUT of the pocket. The first who scored twelve was then the winner. As soon as the Red Ball was introduced, the players, thinking probably that the game might too rapidly run its course, played alternately, each without any regard to the success or failure of the previous stroke of his antagonist. This was entitled the "WINNING," in contradistinction to the "FOLLOWING" Game, to be hereafter described. The "WINNING AND FOLLOWING" Game was subsequently introduced, in which the player FOLLOWED his stroke after winning; but in all these games the player lost by pocketing HIS OWN ball, whence the term "LOSING" hazard, which at once distinguished it from what is called "WINNING" hazard, and which consists in pocketing either the red ball, or that of your adversary. Next came the "WINNING AND LOSING" Game, which may be said to be a combination of the other two, for the player now scores EVERY THING he pockets.

Although a thorough knowledge of this game, like all other human attainments, can be acquired only by practical experience, yet the beginner may greatly facilitate his progress, by a scientific acquaintance with his tools, and the manner in which he is to direct them. The following preliminary remarks will therefore be acceptable:—

The Game of Billiards is played upon a table of oblong shape, the dimensions of which are generally twelve feet, by six; although they are not unfrequently constructed in sizes of six, seven, eight, nine, and even ten and eleven feet in length, the width being always one-half of the length. It is surrounded by an elastic band, or "CUSHION," and at each of the corners, and in the middle of each side, are placed netted pockets, for the reception of the balls, the opening of which is about three inches and a quarter. The balls are made of ivory, and vary in diameter

from one inch and seven-eighths, to two inches, and weigh from four ounces, to four and a quarter: they should be made of ivory (that from the Cape of Good Hope is the best), be very white and close grained, and well seasoned. At the lower end of the table, two feet six inches from the inside of the cushion, is a line technically termed the "BAULK LINE, (see FIG. 1, PLATE V.), in the centre of which is a semi-circle of ten inches radius, from any part of which the player is at liberty to commence his game, but he is not allowed to place his ball beyond the area of the semi-circle. At the upper end of the table, and in its centre, at a distance of two feet six from the end of the cushion (see FIG. 2, PLATE V.), is a point called the "SPOT," on which is placed the red ball for the WINNING Game. In the same line, seventeen inches farther on (see FIG. 3, PLATE V.), is a second spot, for the red ball in the WINNING AND LOSING Game.

There have lately been introduced by Mr. Thurston, of Catherine Street, some important improvements in the manufacture of these tables, both with regard to the BED, and the CUSHIONS. The bed, instead of being constructed of wood, is now generally made of slate, by which not only is the velocity of the ball increased, but the direction of its path more correctly ensured. The cushion is also now fabricated of Indian Rubber, from which the ball rebounds with greater rapidity and precision. It is, however, necessary to notice an objection which has been urged against this latter invention—viz., that in frosty weather, the Caoutchouc will lose much of its elasticity; but this difficulty may be obviated by preserving the temperature of the room;* or the cushion may be taken off and placed before the fire. In warm climates, no such inconvenience can exist. In speaking of the improved table, we should not omit to notice the revolving light contrived by Mr. Thurston. Its position and effect are strikingly indicated in the frontispiece which accompanies this volume.

We next proceed to give some general directions on the following most important subjects:—

1. On the position of the Player.
2. On the position in which the Cue should be held.

* Since the above was written, Mr. Thurston has obtained Her Majesty's Letters Patent for the application of the Vulcanized Indian Rubber to the Cushions, which material retains its elasticity in the coldest temperature.

3. On the method of forming the Bridge.
4. On the method of striking the Ball.
5. On the direction of the eye in striking.
6. On the selection of a Cue.
7. On the leather Point.
8. On the method of affixing the Leather Point.

1. ON THE POSITION OF THE PLAYER.

This is a matter of the very first importance, for should the beginner take a wrong position, he will not readily be able to correct it. He should stand firmly on the right leg, (if a right-handed player), with the left a little bent, and the trunk nearly erect, or not more inclined forward than may be necessary for the left hand to rest with ease upon the table. This position should be steadily preserved until the stroke has been completed, the body remaining unmoved, the arm being the only part that should be brought into action, during the act of striking. (See PLATE I.)

2. ON THE POSITION IN WHICH THE CUE SHOULD BE HELD.

The cue should be held in the right hand, nearly horizontal, about four or five inches from the butt end, although this must in some measure be regulated by the length of the cue. It must not be grasped tight, but held moderately loose in the palm of the hand, with the wrist turned a little outward.

3. ON THE METHOD OF FORMING THE BRIDGE.

In order to form with the hand a rest for the Cue, technically termed the "BRIDGE," the wrist and fingers only should rest upon the table, so as to form a hollow in the palm while the thumb, being raised above the knuckles, will form a groove between them for the reception of the cue, which must be allowed to pass to and fro freely through it. In this position (see FIG. 7, PLATE II.), the hand should be slightly pressed upon the table, so as to secure its steadiness during the act of adjusting and completing the stroke. The space between the bridge and the ball should be about six inches.

4. ON THE METHOD OF STRIKING THE BALL.

It is scarcely necessary to observe how much importance attaches to this circumstance. A Player may take the right.

position, hold the cue correctly, and thus far perform all that is required, and yet he may be unable to strike a ball with firmness and with truth: and for this simple reason, that, in the act of striking, he draws his cue back, say one inch, instead of six, so as rather to make a sort of *PUSH* at the ball, instead of a firm and distinct stroke. His first endeavour should be to place the point of his cue to that part of the ball he intends to strike, then to draw it back about six inches, keeping it at the same time as horizontal as possible, and with a rectilinear motion to force it forward with a kind of jerk, taking care also to strike the ball where he takes aim, or he will fail in his object. This is perhaps, one of the most difficult things for the learner to overcome, and even old players, who have acquired considerable knowledge of the game, have fallen into an error of this kind, and felt surprised that the ball did not return from the cushion in the direction they had expected, and probably condemned the cushion for a fault which was entirely their own. The necessity of keeping the cue in a horizontal position cannot be urged too forcibly, for if the right hand is too much elevated, the ball will jump, and the stroke fail. In *PLATE VI.*, the proper, as well as the improper position of the cue in striking is represented. In the former case the ball will run smoothly along the table; while in the latter it will rise from it, although almost imperceptibly: this will more readily occur when the ball is struck in the centre, or a little above it.

5. ON THE DIRECTION OF THE EYE IN STRIKING.

Let the player first stand to his ball, and before he takes his position for striking, cast his eye to the object ball, that will enable him to accomplish it correctly; then he must place his cue to that part of his own ball which it is his intention to strike, *✓* in doing which, his eye will necessarily rest upon it; after which the sight must be steadily directed to the object ball, and there must it rest until the stroke has been effected; for when the eye is suffered to wander from one ball to the other, the vision becomes distracted, and the power of correctly directing the hand is lost.

6. ON THE SELECTION OF A CUE.

In the choice of a cue, much will depend on the fancy of the operator: some prefer light, others heavy ones; some small, others those which are large at the point, and so on; but the cue to be recommended should be four feet eight inches long; of moderate weight,

say from fourteen to sixteen ounces; half an inch in diameter at the small end, and about one inch and a half at the butt. It should be formed of fine, straight, cross-grained, well-seasoned ash, rather stiff, or with very little spring in it.

7. ON THE LEATHER POINT.

Different opinions have been held upon this subject. Some have preferred double leathers on the cues, and others single ones, but the best players have generally decided in favour of the latter. Should however, the former be selected, the under one should be very hard, and the top one soft; such an arrangement is perhaps, the best for preserving the cue, and is very well adapted for certain strokes, but it cannot be depended upon when the ball is to be struck at a distance. Soft sole leather, or saddle flap, is an excellent material for points; but the author has found, for single points, nothing better than old harness or strap, provided the leather be not too old, which would render it hard and useless.

8. ON THE METHOD OF AFFIXING THE LEATHER POINT.

There are several methods by which the leather point may be affixed to the cue, as by common glue, Indian glue, and other kinds of cement: but the following is the most expeditious:—

Let the point of the cue be filed perfectly flat, and the leather be equally smooth, the latter somewhat exceeding in size, the surface to which it is to be applied. Then take a piece of shell-lac, and fuse it in a flame, taking care that no grease from a candle or lamp reach it, by which its adhesive quality would be destroyed; while in a state of fusion, apply a portion of it to the point of the cue, and hold it again in the flame (not so long as to ignite it, but merely to ensure its perfect liquefaction), then place the leather on it as quick as possible, and press it down close to obtain perfect contact. In about a minute, the cue, thus armed, is to be placed on a board with the point downwards, and the leather cut round with a sharp knife, or chisel, and finally trimmed with a file; after which, it will be ready for immediate use. By such a method, the leather point will frequently be found to stand a considerable time. Other cements may answer the purpose equally well, (for instance, Indian glue, in consequence of its elastic property, will last as long, and

perhaps longer than the brittle shell-lac); but their application is less expeditious. The following is the method to be pursued when the latter is preferred. Let the Indian glue be dissolved in the steam from the spout of a tea-kettle, although in this case several hours are required before it becomes dry. In other respects the process already described is to be followed, care being always taken to insure a perfect contact between the leather and the wood.

A few miscellaneous remarks shall conclude our preliminary directions and instructions. The mode of acquiring a knowledge of the angles of the tables, like the true position of the person, is of the first importance to the young disciple. He is ever to bear in mind, that **THE ANGLE OF INCIDENCE IS EQUAL TO THE ANGLE OF REFLECTION**. The remembrance of this law will be found essential to him in all **DOUBLES**, and in making such **CANONS** from the cushion, as do not require the side stroke; and indeed, in those even that do require it, this knowledge will very materially assist him, (see **PLATE III.**), and it may be here observed, that different strengths (**MOMENTA**) will be productive of different angles, for a ball may run in the same direction to a given point in the cushion, but return from it at an angle verging with the force of the stroke. (See **PLATE IV.**)*

When a ball, or other spherical body, is propelled upon a level surface, it has two motions imparted to it, one progressive, the other rotary; now the marvellous diversity to be observed in the course of billiard balls, may principally be referred to the power which we possess, by means of a round leather-pointed cue, to influence at pleasure the latter of these motions. If the ball be struck a little below the centre, its revolving motion will be for a time, as it were, suspended—and during this interval, should it come in full contact with another ball of equal weight, it will communicate its strength (**MOMENTUM**) to that ball, and become itself stationary: but should the ball be struck, considerably below its centre, its revolving motion will be in a contrary direction; or in other words, in its progress forward, its rotary motion will be the same as if it were running backwards, the

* This may appear somewhat contradictory; but it is to be remembered that, in consequence of the elasticity of the cushion, the ball when struck with great force, alters, for the instant, its **CONTOUR**, and thus give rise to new forces, the effect of which will be a more acute reflection.

whole of the rectilinear strength having been thus imparted, the contra-motion will prevail, and the ball return in a direct line. It must be observed, that in playing this stroke, as also in striking the ball ABOVE the centre, the revolving axis will be horizontal: but if the ball be struck on the side, then it will be perpendicular to the plane of the table; and hence it is, that the side stroke can carry the ball to a greater extent than that made either above or below its centre.* There is less resistance to the ball when running on its vertical axis, than when the axis is horizontal, and hence, also, arises the difficulty of conveying the TWIST, or low stroke, to the object ball at a distance, for unless a considerable force be imparted to it, it will lose its power before it can reach the object ball.

It will be seen in PLATE II. FIG. 1, that there are seventeen different points, or sides,† at which a ball may be struck by the cue; and each point, when struck, will give rise to a different motion. By reference to the diagrams, FIGS. 2, 3, 4, 5, and 6, the student will learn the meaning of the terms, "FULL BALL;" "THREE-QUARTER BALL;" "HALF BALL;" "QUARTER BALL," and "FINE BALL."

The proper position for the ball on the spot is illustrated by PLATE VII. It is either 1, 2, or 3. If the ball be at 4, the hazard MAY be made, but the position will be lost, or can only be recovered by a double in the middle pocket, or going round the table. The best position is when the ball is situated at 1 or 3. If it be at 1, after striking the ball; cushion at 5, and return to the same place again; or otherwise at 6, and go on to the same position on the other side. If the ball lie perfectly straight, it should be struck at point 9 (see FIG. 1, PLATE II.), and made to recoil in a direct line to the same position. If it lie only a little to the left of the line, the ball should be struck at point 8 (see FIG. 1, PLATE II.), and played very slow, so that it may take up the same position on the other side, which is marked 7, in the diagram. But the learner will profit but little by any printed instructions with regard to

* The latter clause of this sentence, namely, "that the side stroke can carry the ball to a greater extent than that made either above or below its centre," is not clearly expressed; the meaning intended to be conveyed is this:—that the effect of the side stroke, will continue longer in the ball; and that the rotary motion (not the ball itself) can be carried to a greater distance, in consequence of the ball running on its vertical axis.

† It may, perhaps, appear strange to speak of the SIDE of a spherical body; but, as the ball presents itself to the player, it may be considered as a disc. rather than a sphere. Some of the colloquial expressions used at Billiards, may sound oddly to the ears of the philosopher, but, being in constant use, they could not, with propriety, be exchanged.

this particular ball, in which every sixteenth of an inch affords a different position, and to play which well requires considerable practice. At the same time, to a good player it is most material, and by far the best position on the table, since a great many hazards may be made from it in succession.

PLATE VIII. exhibits the effect of the side stroke in playing at the cushion. If the ball be played to the centre of the top cushion, and struck at point 1 (see FIG. 1, PLATE II.), it will, by a rebound, return in the same line; so, again, if it be struck at point 2 (see FIG. 1, PLATE II.), it will return at point 2; if at point 3 (see FIG. 1, PLATE II.), it will return at 3; and if the ball be struck on the corresponding points of its opposite side, its path will consequently be in a contrary direction.

We have now put the learner in possession of every species of information which can be considered of an introductory and preliminary kind; but before we pass on to unfold the various games of Billiards, and to elucidate some of the many difficult and almost endless strokes of which each game is susceptible, we would urge upon him to re-peruse the preceding pages, and to familiarize himself with every position and direction therein set forth.

THE WINNING HAZARDS.

There is perhaps, no part of the game that requires so much precision, as playing what is termed, the "WINNING HAZARD;" and yet nothing can be more readily learnt, since the principle which directs it is simple and constant. In whatever situation the ball lies, with respect to the pocket which is selected for its reception, it must be struck at a point diametrically opposite to that pocket, and it may be played with any strength, (provided it be sufficient to carry it thither.) There are however, positions in which it would not be prudent to play it with strength, as there are others in which it would be equally injudicious to play it slow; experience must here guide the judgment; it may, however, be as well to remark, that if the ball should be immediately in front of the pocket, it may be with greater safety played strong, than when it is in an oblique direction in reference to it. (See PLATE V. FIG. 4.) If lines be drawn from the two extremities of the pocket, through the centre of the ball c, where they intersect each other, and diverge at A A, and if similar lines be drawn through B and D, it will be evident that if either of the balls be struck between the points at which the lines emerge, it will be driven into the pocket; but let it be observed that this intermediate space at B, is much less than that at c, and consequently such a hazard will be more difficult to accomplish. And again, if we look at the ball D, the space will appear still further contracted, so that the difficulty just stated, would be again increased, were it not for a compensating advantage derived from the proximity of the player to the ball, by which he is enabled to strike with greater accuracy. It is evident therefore that, for such reasons, the ball B, will of the three, be the most difficult hazard to play, because it has neither the advantage of space, nor of proximity.

PLATE IX. represents a similar hazard to the one just described; and if a player will make the experiment, he will soon be convinced by trying the strokes, that the hazard will be much easier to make if the ball is either at the point B or D, than it would be if it were at point c. It may be observed in this place, that in playing

the winning hazard upon a distant ball, the striking ball should receive its impulse a little below the centre ; since by thus gliding over the surface, it will describe a direct line to the object, with greater position than if it rolled along.

PLATE X., FIG. 1, illustrates a winning hazard from the BAULK into the centre pocket. In this case, the ball should be played slow, or at least with moderate strength ; for, if it be played strong, however correctly, it may jump out of the pocket. FIG. 2 also represents a winning hazard, which should be slowly played, since the space of entrance for the ball is confined. In FIG. 3 this space is less narrow, and consequently, it MAY BE MORE BOLDLY PLAYED.

PLATE XI. The subject of this plate is winning hazards, which will be more likely to be made by a moderate stroke, than by playing strong.

PLATE XII. Here we have the pocket more open to receive the ball, and hence, the winning hazards when played with strength, will have a greater probability of success, since it will be easier to strike the object ball in the intended place by a rapid movement ; because, a ball going with speed will pass over any little irregularities of the cloth,* and continue its direct course ; whereas, a slow ball will find out the imperfections of the surface, and thus deviate from its true course ; in addition to which, there may be and indeed, generally is, a bias in the ball, arising from the contraction of the ivory, or some other hidden cause.†

* This can scarcely be applied to the improved tables of Thurston.

† As the billiard ball is made of ivory, there always must be some one part of the mass more dense than another ; and, consequently, the most skilfully turned ball will have a bias in a greater or less degree.

THE LOSING HAZARD.

A "LOSING HAZARD" is the pocketing your own ball after having struck another. As this species of hazards depends for its success upon strength rather than accuracy, those who have acquired but a moderate skill in the game, will whenever they presents themselves to their notice, generally play for them in preference to all others. But "Losing Hazards" under skilful management, are the most productive part of the game; and, whenever the angle necessary for effecting them is once acquired, they are very easy of performance. In the first place, the beginner must acquire a knowledge of the angle necessary for making an easy hazard. At an angle of 45 degrees, a good player will seldom, if ever, fail. PLATES XIII., XIV., XV., XVI., XVI., XVIII., and XIX. represent hazards of this description, which ought to be played with the slow strength, the ball being struck at point 8 (see FIG. 1, PLATE II.), so as to make it impinge upon the object ball to an extent which is generally termed a "HALF BALL."*

PLATES XX., XXI., XXII., XXIII., XXIV., XXV., XXVI., XXVII., and XXVIII., are intended to furnish additional examples of losing hazards. The player's ball should be struck at point 8 (see FIG. 1, PLATE II.), or a little above the centre, with strength; and the object ball, as in the previous case, should be the stroke of a "half ball."

It will be adviseable in this place to offer a few remarks on the utility of the SIDE-STROKE in playing a losing hazard. It is true that the object may be frequently accomplished without it, but it obviates the difficulty of selecting the right proportion of the ball; for if a ball lies at an angle with the pocket more obtuse than the common losing hazard angle, it will be difficult without

* The term "half ball," as so called in this game, is not, strictly speaking a half ball; for it takes a quarter proportion of the ball more than a true half ball does.

the advantage of a SIDE-STROKE to catch the right proportion of the ball, so as to make your own ball describe the required angle. Besides, it widens, if it may be so expressed, the pocket, or in other words, the same accuracy is not required; for, should the ball strike the cushion at the distance of an inch or two from the pocket, and be played with the side-stroke, it will nevertheless enter it. The side-stroke also causes the striker's ball to take a curvilinear direction from the object ball, after striking it to the pocket; indeed this line, in most losing hazards, will be curved, but never in the same degree, as by the use of the side-stroke. The only angle at which the side-stroke is made use of, in losing hazards, is an obtuse angle; now if you strike your ball in the centre, and take a half-ball of that at which you aim, your ball will run off at an angle of about forty-five degrees; but if you strike your ball on the side, it will, by running on its vertical axis, in some measure overcome the resistance of the object ball, and describe the angle exhibited in PLATE XXIX., FIG. 1. If the striking ball be at A, or on a line from the red ball on the spot, to the corner pocket, it may be struck in the centre, and with moderate strength: if the ball be at B, it may be struck on its left hand side, at point 5 (see FIG. 1, PLATE II.), and played with the same strength—but, should it be at C, it must be struck at point 8 (see FIG. 1, PLATE II.), or a little above the centre, and played with more strength; so that it is in the angle described by the ball B, that the side stroke is the most eligible in playing losing hazards. FIG. 2 represents the same description of hazard. In both cases, the manner in which the balls should be struck, is indicated by the lines representing the cue. The line indicated by the cue as shown in the diagram, describes the true direction in which the ball should be struck.

PLATE XIV., FIG. 1. In the case here represented, A is the striker's ball, B the object ball, C the pocket. The player must place his cue to the point 8 (see FIG. 1, PLATE II.), or a little above the centre of the ball, and play a half-ball with moderate strength. The same may be observed with all losing hazards that come within the same angle; and, should the player's ball be in hand, he must endeavour so to place it, that it may be in that angle with the pocket into which he intends to drive it, provided the limits of the half-circle in the baulk will allow him so to act. In FIG. 2, D is the striker's ball, E the object ball, F the pocket. The player must here place his ball as follows, namely,

E

if the object ball be at α , his ball must be at π ; if at ι , the angle will more nearly approach that of a right angle, and require more strength.

It will be observed in PLATE XXX., to which the attention of the reader is particularly directed, that in playing the side stroke, the cue does not point directly to that part of the object ball which is to be struck, and the greater the distance between the two balls, the greater should be the divergence from that point: neither does the ball, after having been struck, run in a direct line to the object ball, but takes a slightly curvilinear course, as it does also in its progress from the object ball to its future destination. But, in all strokes where it is determined to strike the ball in the centre, or above, or below it, **THE CUE SHOULD POINT WITH PRECISION TO THAT PART OF THE OBJECT BALL WHICH IT IS THE INTENTION OF THE PLAYER TO STRIKE.**

PLATE XXXI., FIG. 1. Here, should the player's ball be at A, B, C, or D, and the red ball on the spot, there will be a losing hazard from it. If at A or D, the hazard will be in either corner, or in one of the middle pockets. Let it be observed that in either case the player's ball will be on a line which extends from the red ball to the pocket. But all this may be frustrated, should the spot not have been correctly placed, which, on a twelve feet table, ought to be thirteen inches from the top cushion. FIG. 2 offers a beautiful illustration of the power and utility of the side stroke. Strike your ball with moderate strength, at point 15 (see FIG. 1, PLATE II.), the object ball being perfectly full, and your ball will describe the irregular path represented in the diagram, and, after striking the cushion, perhaps three or four times, it will enter the pocket.

LOSING HAZARDS BY THE TWIST.

PLATE XXXII., FIG. 1. Strike the ball at point 11 (see FIG. 1, PLATE II.), with force. FIG. 2. This hazard may be made by striking the ball either at point 11 or 17 (see FIG. 1, PLATE II.), with moderate strength.

PLATE XXXIII., FIG. 1. Strike the ball with moderate strength at point 11 (see FIG. 1, PLATE II.) FIG. 2. Strike the ball at point 17 (see FIG. 1, PLATE II.), with moderate strength. FIG. 3. For

this hazard also strike the ball with moderate strength at point 17 (see FIG. 1, PLATE II.)

PLATE XXXIV. This is what is usually termed TWISTING IN FROM THE SPOT. Strike the ball at point 11 (see FIG. 1, PLATE II.), and a little to the left of the centre of the object ball, with force. FIG. 2. This hazard is also made by striking the ball at point 11 (see FIG. 1. PLATE II.)

PLATE XXXV. In each of these hazards the ball should be struck at point 17 (see FIG. 1, PLATE II.)

ON CANONS.

CANONS, on account of their almost endless variety, constitute by far the most interesting part of Billiards; indeed, the same kind of canon will rarely occur twice in the same game, so that the spectator, not less than the player, may derive continuous amusement from a succession of novel positions. It is also in this branch of the game that the greatest improvements have taken place, for balls which were formerly considered as quite safe, and beyond the reach of an attack, now present themselves as subjects of easy canons.

In playing for simple canons, or such as do not require the side stroke, and more especially those which are to be made immediately from one ball to the other, the player should endeavour, if his ball is in hand, to place it at the same angle as that for a losing hazard; and indeed, this rule may be observed when the canons are made from one or more cushions, taking care however to place the ball so as form the same angle with that point of the cushion as the one at which it is intended to rebound, as it is desirable to avoid, if possible, the side stroke, the result of which is an unequal angle. To the less accomplished player, therefore, it is somewhat precarious; for, should the ball be struck too little or too much on the side, the object will fail, or the effect of the stroke be inaccurate.

EASY CANONS.

PLATES XXXVI., XXXVII., and XXXVIII., present canons to be made directly from one ball to the other, in which the ball should be struck at point 8 (see FIG. 1, PLATE II.), or a little above the centre, and with moderate strength.

PLATE XXXIX., FIG. 1. To make this canon, the ball must be struck at point 11 (see FIG. 1, PLATE II.), the object ball being about a three-quarter ball to the left, with a little strength. FIG. 2.

This is a following canon, and may be made by striking the ball at point 6, or even at 7 (see FIG. 1, PLATE II.), but with moderate strength. By this means the ball will glide, (not roll over), the surface — perhaps one-half or two-thirds of the distance — and then roll the remainder; and if a right proportion of the ball be taken, it will follow the canon. The reason of this is, that the ball will travel more correctly when gliding than rolling over the surface; but this can only be effected when the ball is at a distance; indeed, when it is near, it is not necessary.

CANONS BY EQUAL ANGLES.

PLATE XL., FIG. 1. To make this canon, your own ball must be struck at point 1 (see FIG. 1, PLATE II.), with moderate strength, striking the object ball to the left, about a half-ball. FIG. 2. Strike the ball as in FIG. 1.

PLATES XLI. and XLII. Here the ball must be struck as in PLATE XL., clearly showing that the angle of reflection is equal to the angle of incidence.

In playing these canons, it should be observed, that if the ball be struck with too much strength, it will leave the cushion in an acute angle, and if with less than moderate strength, the angle will be obtuse.

CANONS WITH STRENGTH.

PLATES XLIII., XLIV., XLV., and XLVI., are canons, the angles of which approximate more to the right angle, and therefore they must be played with some strength.

CANONS OF EQUAL ANGLES WITH STRENGTH.

PLATES XLVII. and XLVIII. are canons of equal angles with strength.

CANONS BY THE SIDE STROKE.

PLATE XLIX., FIG. 1, shows A the striker's ball, B the object ball, C that upon which the canon is to be made. Now, if A be

F

struck at the point 5 (see FIG. 1, PLATE II.), it will return from the cushion at the angle described, to c. The dotted lines in this plate are introduced to indicate the direction the ball would take if struck in the centre; for, as it has already been observed, **THE BALL WHEN STRUCK, ON ITS SIDE, DOES NOT TAKE A DIRECT LINE.** FIG. 2 represents d as the striker's ball, and e, the object ball. If you wish to make a canon from e to f, the ball must be struck at point 3 (see FIG. 1, PLATE II.), and with some strength; but should you determine to make it on the ball g, you must strike your ball at the point 5 (see FIG. 1, PLATE II.), as the angle to be in this case accomplished is much more obtuse. The dotted lines will here also point out the path the ball would describe, were it struck in the centre; in which case it would be between f and g.

PLATE L. In this canon, a is the striker's ball, b the object ball, and c that upon which the canon is to be made, and which is to be effected by the side stroke. The ball should be struck at point 5 (see FIG. 1, PLATE II.), and with moderate strength.

PLATE LI., FIG. 1, is a canon difficult to perform, since the ball requires the utmost side stroke that can be given to it. It must be struck at point 3 (see FIG. 1, PLATE II.), or at the nearest point on the right hand side. FIG. 2 furnishes a canon of a similar kind; d the striker's ball, e the object ball, and f the ball upon which the canon is to be made. The ball must here also be struck at point 3 (see FIG. 1, PLATE II.), or rather above it, and the object ball quite full.

PLATE LII., FIG. 1. Here a represents the striker's ball, b the object ball, and c that upon which the canon is to be made. The ball a must be struck at point 3 (see FIG. 1, PLATE II.), and about half a ball on b, and it will thus describe the angles that will ultimately bring it to c. FIG. 2. In this case, the ball must be struck at point 13 (see FIG. 1, PLATE II.) and with some little force, taking the object ball as full as possible without KISSING, and your ball will then describe the line as marked in the plate. The explanation of this is as follows:—the two motions of the ball (the progressive and rotary) are, as it were, in conflict with each other, for the propelling power of the cue drives it to the cushion, from which it rebounds before it feels the effect of the high stroke, but the instant this comes into operation, it will manifest its tendency to return to the cushion, and will accord-

ingly describe, or nearly so, the line indicated in the diagram. The ball played at, ought not to touch the cushion, but should be about an inch from it.

PLATE LIII., FIG. 1. To make this canon strike the ball at point 2 (see FIG. 1, **PLATE II.**). **FIG. 2.** This is a canon only to be accomplished by the skilful direction of the cue, and which is not without its difficulties. The point at which the cue should be directed lies in the centre, between the ball c, and the extremity of a line drawn through the balls a and b. The stroke should be made with some force.

PLATE LIV., FIG. 1. To effect a canon in this case, the ball must be struck at point 3 (see FIG. 1, **PLATE II.**), so as to take a quarter of the ball b, but with moderate force. **FIG. 2** shows the same description of canon, but on the other side of the table, and the ball must be struck at point 5 (see FIG. 1, **PLATE II.**)

PLATE LV., FIG. 1. To make this canon from a to b, the ball must be struck at point 11 (see FIG. 1, **PLATE II.**), and with considerable force. **FIG. 2.** In this case, to make the canon from c to d, the ball must be struck as in the former instance.

PLATE LVI., FIG. 1. Strike your ball at point 5 (see FIG. 1, **PLATE II.**), and play a half-ball on the object ball, with moderate strength, and you will effect the proposed canon. **FIG. 2.** Here also the ball must be struck at point 5 (see FIG. 1, **PLATE II.**), with moderate strength, towards the right hand side of the ball at which you play.

PLATE LVII., FIG. 1, represents a canon to be accomplished by a powerful twist and side stroke, to effect which the ball must be struck at point 11 (see FIG. 1, **PLATE II.**), and with great force. **FIG. 2.** To make this canon, strike the ball at point 3 (see FIG. 1, **PLATE II.**), with a little force, and let it attack the object ball perfectly full, so that both balls may strike the cushion at the same point. The object ball will then return at its own angle, as described by the dotted line, and the striker's ball will describe the path necessary for making the required canon.

PLATE LVIII. FIG. 1. We are here presented with a canon "BY THE RECOIL;" for which strike the ball at point 7 or 11 (see FIG. 1, **PLATE II.**), and a little to the left of the centre of the object ball.

FIG. 2 shows a canon which can only be made at a fast-running table, such as the slate bed. In which case, strike the ball at point 5 (see **FIG. 1, PLATE II.**), and fine, on the right hand side of the object ball. It must be played with considerable force.

PLATE LIX., FIG. 1. The player's ball is to be struck at point 13 (see **FIG. 1, PLATE II.**), and the object ball a little to the left of its centre, with moderate strength. **FIG. 2.** The player's ball to be struck at point 5 (see **FIG. 1, PLATE II.**), or a little above it, and the object ball a very little to the right of the centre. **FIG. 3.** To make this canon, the cushion must be first played at, by striking the ball at point 3 (see **FIG. 1, PLATE II.**), with a side stroke of moderate strength.

PLATE LX. FIG. 1. Strike your ball at point 5 (see **FIG. 1, PLATE II.**), and take rather less than half of the object ball. If too much of this ball be taken, your own ball will lose so much power as not to reach its destination. **FIG. 2.** Here the ball must be struck at point 3 (see **FIG. 1, PLATE II.**), with a slight elevation of the right hand, and the object ball must be played fine, on the left hand side, with moderate force.

PLATE LXI. FIG. 1. In making this canon, the required angle is too obtuse to allow its being accomplished immediately from one ball to the other; but, by striking the ball at point 3 (see **FIG. 1, PLATE II.**), and with moderate strength, it may be made from the cushion, as here represented. **FIG. 2.** In this case the ball is to be struck at point 10 (see **FIG. 1, PLATE II.**), and with some force, and the object ball so as to put it into the corner pocket.

PLATE LXII., FIG. 1. Strike the ball at point 3 (see **FIG. 1, PLATE II.**) with moderate strength, and take about half a ball on the left hand of the object ball. **FIG. 2.** Here is a canon of frequent occurrence. The ball must be struck at point 5 (see **FIG. 1, PLATE II.**), with very moderate force, and fine, on the right hand side of the object ball, taking care to strike it before you strike the cushion.

PLATE LXIII., FIG. 1. Strike the ball at point 3 (see **FIG. 1, PLATE II.**), with moderate strength, and about a quarter-ball on the right hand side of the object ball. **FIG. 2.** For this canon strike the ball at point 11 (see **FIG. 1, PLATE II.**)

PLATE LXIV., FIG. 1. Here the ball must be struck at point 11 (see FIG. 1, **PLATE II.**), and with some force, taking the object ball a little to the left of the centre. **FIG. 2.** For this canon, strike the ball at point 8 (see FIG. 1, **PLATE II.**), and about a half-ball on the right-hand of the object ball.

PLATE LXV., FIG. 1. Strike your ball at point 3 (see FIG. 1, **PLATE II.**), and play at the cushion first. **FIG. 2.** This canon is performed by means of a KISS. Strike your own ball full, and take the object ball nearly full.

PLATE LXVI. FIG. 1. In this case, strike the ball at point 4 (see FIG. 1, **PLATE II.**), and play first at the cushion. **FIG. 2** represents a trick, or FANCIFUL STROKE, and it should never be played for in the course of the game. The way however, to effect it is, to strike down upon the ball nearest the corner pocket, striking it a little on the right side, holding the cue vertically.

PLATE LXVII., FIG. 1. Strike the ball at point 3 (see FIG. 1, **PLATE II.**), and fine, on the left hand side of the object ball, with moderate force.

PLATE LXVIII., FIG. 1. This is a canon BY THE RECOIL, to effect which, strike the ball at point 17 (see FIG. 1, **PLATE II.**) **FIG. 2.** In this case, strike the ball at point 3 (see FIG. 1, **PLATE II.**), with moderate force.

PLATE LXIX. To make this canon, strike the ball at point 5 (see FIG. 1, **PLATE II.**), with considerable force.

PLATE LXX. Here you must strike the ball with moderate strength at point 2 (see FIG. 1, **PLATE II.**), and likewise the cushion slightly, so as to touch the object ball.

PLATE LXXI., FIG. 1. Strike the ball with great force at point 17 (see FIG. 1, **PLATE II.**), taking the object ball about a three-quarter ball. **FIG. 2.** In this canon, the ball must be struck at point 5 (see FIG. 1, **PLATE II.**), fine, and with great force, on the right-hand side of the object ball.

PLATE LXXII. To make this canon, the ball must be struck at point 11 (see FIG. 1, **PLATE II.**), about a half-ball on the object ball, and with considerable force.

PLATE LXXIII., FIG. 1. The ball should be struck, in this case, at point 15 (see FIG. 1, PLATE II.), with strength, and a little to the right of the centre of the object ball. FIG. 2. This canon may be made by striking the ball on either side; but the most certain way of effecting it, is, by striking the ball at point 13 (see FIG. 1, PLATE II.).

PLATE LXXIV., FIG. 1. Here the ball must be struck at point 11 (see FIG. 1, PLATE II.), and with considerable force, playing at the object ball as if to pocket it in the corner pocket. FIG. 2. For this canon, the ball should be struck at point 16 (see FIG. 1, PLATE II.), playing at the cushion first.

PLATE LXXV., FIG. 1. The ball must be struck with moderate strength at point 4 (see FIG. 1, PLATE II.), about a quarter-ball to the left of the object ball. FIG. 2. Strike the ball in the centre, and play at the cushion first. It should ever be borne in mind, that in these kinds of canons, everything depends upon the player's striking the cushion in the right place.

PLATE LXXVI., FIG. 1. To make this canon, strike the ball at point 11 (see FIG. 1, PLATE II.), with considerable force, taking the object ball a little to the left of the centre. FIG. 2. For this, strike the ball at point 11 (see FIG. 1, PLATE II.), with moderate strength, a little to the left of the centre of the object ball.

PLATE LXXVII., FIG. 1. In this case strike the ball at point 17 (see FIG. 1, PLATE II.), and with great force, striking the cushion first. FIG. 2. To make this canon, strike the ball at point 3 (see FIG. 1, PLATE II.), and with moderate strength.

PLATE LXXVIII., FIG. 1. To make this canon the ball must be struck at point 3 (see FIG. 1, PLATE II.), and played slow, striking the object ball fine, on the left-hand side. FIG. 2. As this canon requires a great side stroke, strike the ball at point 3 (see FIG. 1, PLATE II.), with moderate strength, playing fine on the left-hand of the object ball.

PLATE LXXIX., FIG. 1. To make this canon, strike the ball at point 3 (see FIG. 1, PLATE II.), and with strength, taking the object ball a little to the left of the centre. FIG. 2. For this, strike the ball at point 11 (see FIG. 1, PLATE II.), and pocket the object ball.

PLATE LXXX., FIG. 1. Strike the ball at point 3 (see FIG. 1, PLATE II.), with moderate strength, and fine, to the left of the object ball. FIG. 2. Take about a half-ball on the object ball, and strike the ball at point 3 (see FIG. 1, PLATE II.), with moderate strength.

PLATE LXXXI., FIG. 1. To make this canon, strike the ball at point 4 (see FIG. 1, PLATE II.), and fine, on the left-hand side of the object ball. FIG. 2. Here, to make a canon by the RECOIL, and from the cushion, strike the ball at point 11 (see FIG. 1, PLATE II.), with moderate strength, a little to the left of the centre of the object ball.

PLATE LXXXII., FIG. 1. Strike the ball at point 2 (see FIG. 1, PLATE II.), and about a half-ball on the object ball. FIG. 2. To make the canon in this way, the ball should be struck at point 11 (see FIG. 1, PLATE II.), and perfectly full at the object ball. The ball will recoil in a direct line, or nearly so, to the cushion, and from thence take the direction for effecting the canon.

PLATE LXXXIII., FIG. 1. Strike the ball at point 3 (see FIG. 1, PLATE II.), and something less than a half-ball on the object ball, but not with much force. FIG. 2. Here the ball must be struck at point 3 (see FIG. 1, PLATE II.), and with strength.

CANONS BY THE KISS.

PLATE LXXXIV., FIG. 1. In this canon the ball should be struck at point 15 (see FIG. 1, PLATE II.), and with moderate force, striking the object ball at that point which is diametrically opposite to the cushion. FIG. 2. Here the ball must be struck at point 13 (see FIG. 1, PLATE II.), and with moderate strength, striking the object ball as before. FIG. 3. Strike your ball at point 6 (see FIG. 1, PLATE II.), and the object ball as previously directed.

CANONS BY THE TWIST.

PLATE LXXXV., FIG. 1. The stroke laid down in the diagram shows the possibility of one ball receiving a side stroke from another. Let the ball be struck in the centre, and be played at the cushion so that it shall glance upon the ball B in its return, then describe the line across the table to c, and afterwards travel from thence to the ball D. FIG. 2. To make this canon, strike the ball at point 11 (see FIG. 1, PLATE II.), and with a little strength.

MAKING THE BAULK.

PLATE LXXXVI. This and the five following plates afford directions for making what are termed BAULKS, that is, the bringing both balls within the striking line. FIG. 1. Strike the ball at point 8 (see FIG. 1, PLATE II.), and a little to the right of the centre of the object ball, with moderate strength. FIG. 2. To make this baulk, strike the ball at point 16 (see FIG. 1, PLATE II.), with moderate force, and a half-ball on the object ball.

PLATE LXXXVII., FIG. 1. Strike the ball at point 3 (see FIG. 1, PLATE II.), and the object ball quite full, with moderate strength. FIG. 2. This baulk may be made by playing on either side of the ball; but to effect it in the way described, the ball must be struck at point 5 (see FIG. 1, PLATE II.), with moderate force, and about a quarter-ball on the object ball.

PLATE LXXXVIII., FIG. 1. Strike the ball at point 4 (see FIG. 1, PLATE II.), with moderate strength, and an exact half-ball on the object ball. FIG. 2. Here the ball must be struck at point 17 (see FIG. 1, PLATE II.), and a half-ball on the object ball with some force.

PLATE LXXXIX., FIG. 1. In this case the ball must be struck at point 11 (see FIG. 1, PLATE II.), with moderate strength, and a little to the left of the centre of the object ball. FIG. 2. If the striker's ball be at A, it must be struck at point 4 (see FIG. 1, PLATE II.), and about a half-ball to the left of the object ball, with moderate strength; but if it lie at B, then it must be struck at point 4 (see FIG. 1, PLATE II.), and a half-ball on the right hand side of the object ball. In the first case, the object ball will describe an angle nearly similar to that which is performed by the striker's ball when played from B, and VICE VERSA.

PLATE XC. This is a baulk that is only to be made at a fast-running table. Strike the ball at point 11 (see FIG. 1, PLATE II.), with great force.

PLATE XCI. This, like the preceding, is only to be made at a fast running table: at least, in the way indicated in the diagram. Let the ball be struck at point 7 (see FIG. 1, PLATE II.), with great force, so as to return in a direct line, or at least at a very acute angle.

PLAYING BACK IN BAULK.

PLATE XCII. This and the following plate contain directions for playing back at the balls in baulk. They both exhibit diagrams all of equal angles, and the different strokes to be played with the butt. If you place your ball at 1, or on the right-hand extremity of the half-circle, and play at the centre of the top cushion, immediately behind the spot, it will return at 3, or the left-hand extremity; therefore this should be taken as a guide in most of the balls that are played at directly back from a cushion. Suppose, for instance, the ball A to be two inches within the left-hand extremity of the half-circle; you must place your ball two inches within the right-hand extremity, and play at the centre of the top cushion. But if the ball is at B, or two inches outside the left-hand extremity, then the limits of the half-circle will not allow of your placing your ball in the corresponding angle, so as to strike the centre of the top cushion; you must therefore, place your ball at the right hand extremity, and play one inch to the left of the centre of the cushion. If the ball you wish to play at, is at C, you should place your ball at the right-hand extremity of the half-circle, and take the angle so that your ball shall pass the middle pocket before it strikes the side cushion. If, again, it is at D, place the ball the same, but let it strike the side cushion before it pass the middle pocket. You will, in both cases, by this means, avoid the middle pocket. To make a canon upon the balls E and F, place your ball at 3, and play as before directed, with strength.

PLATE XCIII. To hit the ball back from one cushion only, place your cue so as to lie between the ball you play at, and your own, just in the centre, and strike the place to which it points at the top cushion.

GENERAL OBSERVATIONS ON THE GAME.

It may not perhaps, be deemed out of place here to make a few general remarks on the game, in order further to assist the inexperienced player. To a person at all conversant with Billiards, it will be evident that the various positions of the balls, as represented in the diagrams by which this treatise is illustrated, are of frequent occurrence in the course of play: and although it would not all times be prudent to attempt to realize them, yet they may serve as a *CORPS DE RESERVE*, when the balls would be otherwise safe. I mean, of course, such diagrams as relate to side strokes, canons, &c, which, if the player be able to perform with tolerable accuracy, will give him a decided advantage over his antagonist, would therefore recommend those who wish to learn the game, first to practise easy hazards and canons, until they can make them in the general, with certainty. I would also advise them not to be too anxious to leave the ball safe from the adversary; but when they play to score, to endeavour to leave the balls so that they may be in a good situation for themselves—particularly if they are about to play for an easy hazard or canon. It would be difficult, if not impossible to convey in writing, specific instructions as to when, and where, these latter games should be played for, since so much depends on the ability of the player: hence what would be proper for one person to play for, would be improper in another, and *VICE VERSA*. But this much may be observed, that it will be more prudent to play for them in a backward game, than when the game is in advance; for if they succeed, much may emanate from them, and leave the game open; whereas, if a person has the advantage in the game, he should not risk too much, but play it safe, and endeavour to keep that advantage. One thing however, is absolutely necessary, and that is, when a ball has to be struck at a point diverging from the centre, the stroke should never be attempted without first chalking the cue, to prevent its slipping.

I have before observed, that to make the “winning hazards,” the ball must be struck at that point which is diametrically opposite

to the pocket. Those therefore, who wish to learn to play Billiards skilfully, will do well to practise this branch of the game ; for when they know where the ball should be struck, nothing but practice will enable them to do it with certainty ; and experience alone must teach them when, and where to play those games with strength, or otherwise. As a general rule, however, it may be remarked, that the white ball may be played slow to a pocket, with more security than the red one.

When a person has once attained to the knowledge of the proper angle on which to place the ball for the losing hazard, he will be able, with a very little practice, to make it with tolerable certainty. The losing hazards are more dependent on the strength than on the accuracy with which the ball is struck ; and they are in general, more productive than anything else ; hence it is that they ought, ordinarily, to be played for in preference to any other game : but, of course, there are exceptions to this. One reason why they are more productive than winning hazards or canons is, that after making the losing hazard, the ball is in hand, and there is the range of the half-circle from which to play the succeeding stroke. Besides, in playing for the losing hazard, and endeavouring to leave the ball in a good situation afterwards, you have only one ball to attend to ; whereas, in playing for a canon, you have oftentimes two balls which you are anxious to lay in a good situation, and the attention thereby becomes distracted, or at least divided.

RULES AND REGULATIONS TO BE OBSERVED IN PLAYING THE DIFFERENT GAMES OF BILLIARDS.

HAVING in common with others, experienced great difficulty in deciding, to the satisfaction of all parties, many strokes and accidents that occur at Billiards, I have been at the pains to collect and arrange the generally received rules for the game, as observed in most of the principal club-houses and respectable public rooms in the kingdom; and, although it would be next to impossible to commit to writing all the "chapter of accidents" and mistakes which occur in the course of play, yet it is hoped that the subjoined "Rules and Regulations" will be found sufficient for all ordinary disputed cases, and likewise serve as a book either of reference for the public Billiard room, or a gentleman's private table.

GENERAL DIRECTIONS.

1. If a player, in the act of striking, touch his ball with the mace or cue, it is considered a stroke.
2. If the striker should accidentally touch or move his own ball, without intending, at the same time, to make a stroke, he loses no point; but the adversary may, if he choose, put the ball back in the place where it stood.
3. All strokes made with the point of the cue are fair, except the balls touch.
4. If a ball be found to have been changed during the course of the game, and it be not known by which player, the game must be played out with the balls as they are.
5. Any one who leaves the game before it is finished, and will not play it out, loses it.

6. Every person ought attentively to listen for the stroke before he opens the door of a Billiard room.

7. A love game is when no hazard has been made.

8. All disputes are to be referred to the marker. No person should give an opinion as to whether a stroke be fair or foul, unless appealed to by the parties playing ; and no one should in any way interfere with the game, except when the marker cannot decide a dispute ; in which case, reference may be made to any by-standers, who may also correct the marker if he mis-score the game.

9. The marker should be careful to make those persons who do not play, stand from the table, and give room for the players to pass freely round.

THE WHITE WINNING GAME.

This is the original game of Billiards, but now very seldom played : perhaps on account of its monotony, and the great diversity there is in other and subsequently invented games. It is played twelve up.

The following rules govern this game :—

1. In commencing the game, string for the lead. The player, in stringing for the lead, or when his ball is in hand, must stand having both feet within the limits of the corner of the table, and must not place his ball beyond the stringing spots : the person who brings his ball nearest the cushion at the lower or baulk end of the table, wins the lead, and the choice of balls.

2. After the first person has strung for the lead, if his adversary who follows him, make his ball touch the other, or hole his own, he loses the lead.

3. If the leader follow his ball, with either mace or cue, beyond the middle pocket, it is no lead, and his adversary may, if he choose, insist on his leading again.

4. When a hazard has been lost in any one of the corner pockets, the leader is obliged, if his adversary require it, to lead from the end of the table where the hazard was lost; but if the hazard were lost in either of the middle pockets, it is at the leader's option to lead from either end of the table he please.

5. If the striker do not hit his adversary's ball, he loses one point; and if, by the same stroke, his ball should go into a pocket, over the table, or lodge on a cushion, he loses three points, viz. : one for missing his adversary ball, and two for holing his own.

6. If the striker hole his adversary's ball, or force it over the table, or on a cushion, he wins two points.

7. If the striker hole his own ball, or force it over the table, or on a cushion, he loses two points.

8. If the striker hole both balls, or force them over the table, he loses two points.

9. No person has a right to take up his ball without the permission of his adversary.

10. If the striker touch or move his own ball, not intending to make a stroke, it is deemed an accident, and he must, if his adversary require it, put back the ball in the place where it stood.

11. He who does not play as far as his adversary's ball, loses one; or his adversary may oblige him to pass the ball, more especially in giving a miss; or, he can, if he choose, make him replace the ball, and play until he has passed it.

12. If the striker miss his ball, in attempting to make a stroke, it is not considered anything, and he may try again.

13. If the striker's ball stand on the edge of a pocket, and in playing it off, he cause it to go in, he loses three points.

14. If a ball standing on the edge of a pocket, should fall in, before or when the striker has delivered his ball from his mace or cue, so as to have no chance for his stroke, the striker's and his adversary's balls must be placed in the same position, or as near where they originally stood as possible, and the striker must play again.

15. If the striker play both balls from his mace or butt, so that they touch at the same time, it is a foul stroke.

16. A person cannot score if he make a foul stroke: it is called foul, if the striker play with the wrong ball; or if he touch his own ball twice in playing; or if he strike a ball whilst yet running; or if his ball touch another ball; or if both his feet are off the floor when playing. The penalty in all these cases is breaking the balls, and losing the lead.

THE WHITE LOSING GAME.

This game is the reverse of the last; the losing hazards scoring for the striker, and the winning for the adversary, except when a double hazard is made—then they both score for the striker.

All the rules of the former game must be observed at this.

THE RED WINNING CARAMBOLE GAME.

This game is played eighteen up; and is scored by winning hazards and canons. Losing hazards, misses, and coups, are forfeits to the adversary.

1. In commencing, string for the stroke and choice of the balls, the same as in the white game.

2. A red ball is to be placed on a spot made for that purpose in the centre, between the stringing dots at the upper end of the table.

3. The white or striker's ball is to be played from a spot made for that purpose, or from within the ring usually described in the centre, between the stringing spots, in the baulk, or lower end of the table.

4. After the first striker has played, his adversary is to follow, and so on alternately throughout the game.

5. If the striker miss both the balls, he loses one ; and if he pocket his own ball by the same stroke, he loses three points.

6. If the striker hit the red ball, and his adversary's ball, with his own ball, he wins two points : this is called a canon.

7. If the striker hole his adversary's ball, he wins two points : if he hole the red, he wins three.

8. If the striker hole the red and his adversary's ball by the same stroke, he wins five points : two for the white, and three for the red ball.

9. If the striker make a canon, and hole his adversary's ball and the red ball by the same stroke, he wins seven points.

N.B. Always count two for the canon, two for holing the white, and three for the red ball.

10. Forcing any one or all the balls over the table, does not reckon any point.

11. If the striker hole his own ball, by a foul or a fair stroke, he loses either two or three points, according to whichever ball he struck first. Three for the red, and two for the white.

12. If the striker make a canon or a winning hazard, and force any of the balls over the table, he wins nothing by the stroke.

13. After the red ball has been holed, or forced over the table, the striker of it is bound to see it placed on the proper spot before he strikes again ; otherwise, he can win no points while the ball is out of its place, and the stroke is deemed foul.

14. If, after the striker has made a canon, or holed his adversary's or the red ball, he should touch either of the balls which remain on the table, with hand, stick, or otherwise, he cannot score the points he made by the stroke, as it is deemed foul.

15. If the striker play with the wrong ball, or miss both the balls, he loses one point ; and if the ball should go into a pocket by the same stroke, he loses three points.

16. If either, or both balls, be upon the line, or within the stringing dots, where the white ball is originally placed when the

adversary's ball is off the table, it is called a baulk, and the striker, who is to play from the circle, must strike outside the baulk, and make the ball in returning, hit one of those within the baulk; and should he not hit either of the balls, his adversary gains one point.

17. If, after the red ball has been holed, or forced over the table, either of the white balls should lie upon, or be so near the spot, that the red cannot be placed in its proper situation without their touching each other, the red ball must then be placed on the spot in the centre of the table.

THE RED LOSING GAME.

This game is also played eighteen up, and is scored by losing hazards and canons. Winning hazards, misses, and coups are forfeits to the adversary.

THE WINNING AGAINST THE WINNING AND LOSING.

This game is played twenty-one up, and is equal to giving the adversary about nine points.

Rules the same as in the foregoing games.

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THE WINNING AND LOSING GAME.

In some public rooms this game is played twenty-one up, and in others twenty-four, fifty, and a hundred up, or even more; but twenty-four is the number it is generally played at. It is scored by winning hazards, losing hazards, canons, and forfeits.

1. The game commences by stringing for the lead and choice of the balls, as in the White Winning Game.*

* It is imagined by some persons that the receiver of points, if any be given, is bound to lead off. But this is wrong; for the points given are understood to equalize the game. Why, therefore, should one party give away any supposed advantage he may possess over the other?

2. The red ball must be placed on the spot nearest the top of the table, and replaced there when it is holed, or forced over the edge of the table, or when the balls are broken.

N.B. Breaking the balls is placing them as at the commencement of the game.

3. Whoever breaks the balls, leads off, unless when they are broken by mutual consent, in which case the lead should be stipulated for, or strung for.

4. If a player make one stroke in a game, he must finish that game; otherwise he loses it.

5. If the striker make any points, he may continue his game until he ceases to make points.

6. If, when the cue is pointed, the ball should be moved without the striker intending to strike, it must be replaced; and if not replaced before the stroke be played, the adversary may claim it as a foul stroke.

7. If a ball spring from the table, and strike one of the players, or a by-stander, so as to prevent its falling on the floor, it must be considered as off the table.

8. If a ball run so near the brink of a pocket, as to stand there, and afterwards fall in, it must be replaced, and played at, or with, as the case may be.

N.B. There is no necessity for challenging a ball. The umpire must decide whether the ball has stood or not.

9. If (as it may sometimes happen) a ball be spinning on the brink of a pocket, and although stationary for a time, afterwards fall in, in that case the hazard is scored, if the motion be not gone out of the ball at the time it falls into the pocket.

10. If a ball lodge on the top of a cushion, it is considered as off the table.

11. After the adversary's ball is off the table, and the two remaining balls are either upon the line, or within the stringing dots at the lower end of the table, where the white balls are originally placed in leading, it is called a baulk, and the striker, who is to play from the ring, must strike outside the baulk, so as to occasion his ball, in returning, to hit one of the balls in the baulk: if not, he loses one point.

12. A line-ball is when the centre of the ball is exactly on the

line of the baulk, in which case it is to be considered in the baulk, and cannot be played at except from a cushion out of the baulk.

13. All misses to be given with the point of the cue, and the ball struck only once; if otherwise given, the adversary may claim it as a foul stroke, and enforce the penalty,—make the striker play the stroke over again,—or have the ball replaced where it was struck from the second time.

14. A person cannot score if he make a foul stroke.

NOTE 1. It is called foul if a striker move a ball in the act of striking; or if he play with the wrong ball; or if he touch his own ball twice in playing; or if he strike a ball whilst it is running; or if he touch another ball; or if his feet are off the floor when playing. The penalty in all these cases is breaking the balls and losing the lead.

NOTE 2. Enforcing the penalty for a foul stroke is entirely at the option of the adversary.

15. If the adversary do not choose to enforce the penalty for a foul stroke, the striker may play on, and score all the points that he made by the foul stroke—which the marker is bound to score.

16. If the striker hole the white ball (called a white winning hazard), or if he hole his own ball from the white ball (called a white losing hazard), he gains two points; if he do both, he gains four points.

17. If the striker hole the red ball, he wins three; and if by the same stroke he hole his own from the red, he wins three more.

18. When the red ball is pocketed, or off the table, and the spot on which it should stand is occupied by the white ball, it must be placed in a corresponding situation at the other end of the table; but if that should be occupied also by the other white ball, it must be placed in the centre of the table, immediately between the two middle pockets; and wherever it is placed, there it must remain, until it be played, or the game be over.*

19. If the striker play at the white ball first, make a canon, and pocket his own ball, he gains four points: two for the canon, and two for the white losing hazard.

20. If the striker play at the white ball first, and pocket his own ball and the red one, he gains five points.

* It is the custom in some billiard-rooms, if the spot be occupied by the white ball, to place the red ball in the centre of the table; but it is much more common to place it at the other end; besides, the situation is more uniform.

21. If the striker play at the white ball first, make a canon, and pocket the red and the white balls, he gains seven points.

22. If the striker play at the white ball first, make a canon, and at the same time pocket his own and his adversary's ball, he wins six points: two for the canon, and two for each white hazard.

23. If the striker play at the white ball first, and pocket all the balls without making a canon, he gains seven points.

24. If the striker play at the white ball first, make a canon, and pocket all the balls, he gains nine points.

25. If the striker play at the red ball first, and pocket it and his own ball, he gains six points.

26. If the striker play at the red ball first, make a canon, and by the same stroke pocket his own ball, he gains five points: two for the canon, and three for the red losing hazard.

27. If the striker play at the red ball first, make a canon, and pocket the red and the white ball, he gains seven points.

28. If the striker play at the red ball first, make a canon, and at the same time pocket his own and the red ball, he wins eight points: two for the canon, three for the red losing, and three for the red winning hazard.

29. If the striker play at the red ball first, and pocket his own and the white ball, without a canon, he gains five points.

30. If the striker play at the red ball first, and pocket all the balls, without a canon, he gains eight points.

31. If the striker, by striking the red ball first, make a canon, and by the same stroke, pocket his own and both the other balls, he gains ten points; being the greatest number that can be gained by one stroke.

32. If the striker, in taking aim, move his ball, so as to strike the ball he is playing at, without intending to strike it, it is a stroke, and must pass as such, unless the adversary choose to let him play the stroke over again.

33. If the striker, in the act of striking, move his ball ever so little, it is a stroke.

34. If the striker, miss the ball he intended to play at, he loses one point; and if by the same stroke his own ball runs into a pocket, he loses three points: that is to say, his adversary scores so many points. This is called a *Coup*.

35. If the striker force his own, or either of the other balls over the table, after having made a canon or a hazard, he gains nothing by the stroke, and his adversary may play on without breaking the balls.

36. If the striker wilfully force his ball off the table without striking another ball, he loses three points ; but if the ball go over by accident, he loses one point only for the miss.*

37. If the striker play with the wrong ball, and a canon or hazard be made thereby, the adversary may have the balls broken ; but if nothing be made by the stroke, he (the adversary) make take his choice of balls the next stroke, and with the ball he choses he must continue to play until the game is over.

N.B. The playing with the wrong ball must be discovered before the next stroke is played, otherwise no penalty attaches to it.

38. No person has a right to inform the adversary that the striker has played, or is about to play, with the wrong ball.

39. No person, except the adversary, has a right to inform the striker that he is playing the wrong ball.

40. If the adversary do not see the striker play with the wrong ball, or, seeing it, does not choose to enforce the penalty, the marker is bound to score all the points that may have been made by the stroke.

41. If the striker's ball be in hand, and the red and the adversary's balls within the baulk, he (the striker) cannot play at them, except from a cushion out of the baulk.

42. If the striker's ball be in hand, and the other two balls within the baulk, and should he, either by accident or design, strike one of them, without first playing out of the baulk, the adversary has the option of letting the balls remain as they are, and scoring a miss,—of having the ball so struck replaced in its original position, and scoring a miss,—of making the striker play the stroke over again,—or of making it a foul stroke, and breaking the balls.†

* To a person conversant with the game, it is not a very difficult thing to discern whether a ball is forced over wilfully or not ; and it would be severe upon the striker to be compelled to lose three points for what may be the fault of the table.

† At first sight this would appear a harsh rule, with a heavy penalty annexed to it ; but, perhaps, the adverse party may have laid his plans with skill, and he must not, therefore, have them unfairly frustrated with impunity. Besides, care must be taken that the adversary be not a sufferer by the unfair play or blunders, of the striker.

43. If the striker's ball be in hand, he has no right to play at a cushion within the baulk, in order to strike a ball that is out of it.

44. If the striker's ball be in hand, and he, in playing from the baulk, should move his ball in the act of striking, it is a stroke, although the ball should not go out of the baulk; but the adversary may, if he choose, compel him to play the stroke over again.

45. If the striker's ball be near the ball he plays at, and he play the stroke with the point of the cue, it is fair; but if he play it with the butt end, the marker must decide whether it be foul or fair.

N.B. The principle which ought to govern the decision of the marker in such a case is this, namely, that the striker's butt must quit his ball before it comes in contact with the other ball.

46. If the striker's ball be on the brink of a pocket, and he, in the act of striking, miss it, and, in drawing back his cue, knock it (the ball) into the pocket, he loses three points,—it being a coup.

47. If the striker, in giving a miss from the baulk, should let his ball remain in the baulk, without its having gone out, the adversary may either let it remain so, or compel him to play the stroke over again.

48. If the striker in giving a miss, should make a foul stroke, and his adversary claim it as such, and enforce the penalty, the miss it not scored.

49. No person is allowed to take up a ball without permission of the adversary.

50. If one of the players move a ball by accident, it must be replaced to the satisfaction of the adversary.

51. If, in the course of the game, a person take up a ball, supposing it to be in hand, the adversary may break the balls, or have them replaced to his own satisfaction.

52. If the marker, or a by-stander, touch either of the balls, whether it be running or not, it must be placed as near as possible to the place it did, or would, apparently, have occupied.

53. If, after the striker has made a canon or a hazard, he take up the ball, thinking the game is over, the adversary has the option of breaking the balls, or having them replaced.

54. If after the striker has made a miss or a coup, he take up a ball, supposing the game to be over, he loses the game.

55. If, after the striker has made a miss or a coup, the adversary, thinking the game is over, take up a ball, he (the last striker) may have the balls replaced as they were, or break the balls.

56. If, after the striker has made a canon or hazard, the adversary, thinking the game is over when it is not, take up a ball (whether running or not), he loses the game.

57. If, after striking, the striker should obstruct or accelerate the running of the balls in any way, it is at the adversary's option to make it a foul stroke and break the balls, or have them replaced.

58. If, after the striker has played, the adversary should obstruct or accelerate the running of the balls in any way, he (the striker) may claim the right of breaking the balls, or having them placed to his own satisfaction.

59. No person has a right to offer advice to the players during the progress of the game. But,

(1) If a person be appealed to by one of the players, or by the marker, he has then a right to give an opinion, whether he be interested in the game or not; and

(2) If a spectator see the game marked wrong, he has a right to mention it, provided he does it in time for it to be rectified, but not afterwards.

60. No person is allowed to walk about the billiard-room during the game, make a noise, or otherwise annoy the players.

61. When silence is demanded in the room, it is expected that all persons will comply therewith.

62. It is expected that all persons in the room, whether they are playing or not, will conform to the foregoing rules, in so far as they relate to them respectively.

A MATCH OF FOUR.

When four persons play this game, thirty-one is the number played for, and each player is at liberty to offer his partner advice, unless it be directly stipulated to the contrary. A winning hazard,

a losing hazard, or two misses without an intervening hazard, puts out; and also a coup, but not a canon. A player must play one stroke before he can be put out.

All the foregoing rules to be observed at this game.

THE GAME OF THREE, OR A LA ROYALE.

This game is played as at the winning and losing game, by three persons, each scoring his own game.

The mode of playing it is as follows: The three players string for choice of going off. The ball which is nearest to the cushion has the first choice, and the second nearest, the second. The one that has to lead off, plays; the second follows, playing with the other white ball. The third plays with the ball the first played with; the first with the ball the second played with, and so on, each taking it in turn, and changing the balls alternately. He who is out first, wins the game; the other two losing a game each.

All forfeits, such as misses, coups, &c., score for both the adversaries. If the two adversaries are so near together at the close of the game, that the forfeiture, whatever it may be, makes them both out, the next player wins the game.

All the rules of the "winning and losing" game are to be observed at this.

OF CRAMP GAMES.

All cramp games are played sixteen up; and, generally, by good players against indifferent ones, in order to equalize the play.

TWO POCKETS TO FOUR.

This game is equal to giving about five in the sixteen; and all balls that go into the pockets belonging to the respective parties, score them.

ONE POCKET TO FIVE.

In this game, one of the players has one pocket only, and the other player five pockets, and the game is scored in the same manner as the last.

SIDE AGAINST SIDE.

In playing this game, one player takes the three pockets on the one side of the table, and the other takes the three on the other side; and the game is scored as in the two former games.

All the rules of the "winning and losing" game are to be observed at this, and the two foregoing games, with the following additional ones:—

1. If the striker has made the last hazard in the game, and his adversary take up a ball off the table, the game is over, and the striker wins it, although his ball should afterwards go into his adversary's pocket.
2. If the striker, after having made the last hazard in the game, should take up or move the balls when running, so as to prevent them going into his adversary's pocket, he loses the hazard.
3. If the striker make a hazard in the adversary's pocket, and force his ball off the table, he loses the hazard.

THE GO-BACK GAME.

This game is equal to giving about six in sixteen, though much depends on the goodness of the play with regard to odds: the better the player, the less will be the odds. The player of this game must win it at some one interval of his adversary's scoring; for every time the adversary makes a canon or hazard, all the points which the go-back player has made are taken off, and he goes back to the commencement.

All the rules of the "winning and losing" game are to be observed in playing this.

THE COMMANDING GAME.

The playing of this game against the "winning and losing," is giving very great odds,—equal to about twelve out of sixteen; and the person who plays the "commanding" game must play at

the ball his adversary commands him to play at, nor is he allowed, under any circumstances, to play at the other.

All the rules of the "winning and losing" game are to be observed at this, with the following additional ones :

1. If the striker play at one ball, when he is commanded to play at the other, the adversary may replace the ball so played at.

2. If the striker, in playing at the ball he is commanded to play at, should miss it, and strike the other, he loses one for the miss, and the balls remain as they were ; and, should a hazard be made, it does not score.

3. If the striker's ball be so situated that he cannot get at the ball he is commanded to play at so as to score, he must give a miss, or hit it in the best way he can.

4. If the striker's ball be touching one ball, and he is commanded to play at the other, he may, if he can do so without moving the ball in contact with his own ball, score all the points he makes by the stroke.

5. If the striker is commanded to play at the ball that is touching his own, it cannot be a fair stroke.

THE STOP, OR NON-CUSHION GAME.

This game is equal to giving about half the game, and the player loses one point when his ball touches the cushion.

All the rules of the "winning and losing" game are to be observed at this, with the following additional ones :

1. If the striker's ball touch the cushion, he loses one point.

2. If the striker's ball touch the cushion more than once, he loses one point only.

3. If the striker make a canon or hazard, and his ball touch the cushion, he loses one point, and he does not score the canon or hazard.

4. In playing for a losing hazard, if the ball go into the pocket, although it may touch the cushion in going in, it scores,—provided it be not by a double from a cushion.

5. In playing back at a ball in the baulk, the striker is allowed to strike one cushion; but if he strike the second, he loses one point.

THE WHITE BALL AGAINST THE RED.

This game is equal to giving about seven points out of the sixteen. One player plays at the white ball, and the other at the red, and neither of them is allowed, under any circumstances, to play at the other ball.

The rules of the “winning and losing” game govern this game also.

THE DOUBLET GAME.

This game is scored by doubles and canons; the losing hazards score against the striker, and the winning hazards do not score at all.

The rules of the “winning and losing” game are to be followed at this.

THE BRICOLE GAME.

A person to play this game against the “winning and losing,” would be giving his adversary immense advantage; for, if the player of this game could give his adversary ten out of sixteen at the “winning and losing” game, the adversary could give him ten at this.

The rules of the “winning and losing” game are also to be observed in playing this game.

THE GAMES OF POOL.

There are several ways of playing Pool,—namely, with as many balls as there are players; or with two balls only, the players playing in turns, and playing with the alternate balls; playing at the nearest ball; playing at the last player; or the player playing at whichever ball he choose. But the most popular mode is that in which the player plays at the last player. This is likewise the fairest way of playing the game.

The following are the rules for playing the game according to this last method.

1. When coloured balls are used, the players must play progressively, as the colours are placed on the Pool marking-board, the top colour being No. 1.

2. Each player has three lives at starting. No. 1 places his ball on the winning and losing spot—No. 2 plays at No. 1—No. 3 at No. 2, and so on, each person playing at the last ball: unless it should be in hand, then the player plays at the nearest ball.

3. If a striker should lose a life in any way, the next player plays at the nearest ball to his own; but if his (the player's) ball be in hand, he plays at the nearest ball to the centre of the baulk-line, whether in or out of baulk.

4. Should a doubt arise respecting the distance of balls, it must (if at the commencement of the game, or if the player's ball be in hand,) be measured from the centre spot in the circle; but if the striker's ball be not in hand, the measurement must be made from his ball to the others; and in both cases it must be decided by the marker, or by the majority of the company; but should the distances be equal, then the parties must draw lots.

5. The baulk is no protection at this Pool under any circumstances.

6. The player may lose a life by any one of the following means:—by pocketing his own ball; by running a coup; by missing

the ball ; by forcing his ball off the table ; by playing with the wrong ball ; by playing at the wrong ball ; or by playing out of his turn.

N.B. A life is lost by a ball being pocketed, or forced off the table by the adversary.

7. Should the striker pocket the ball he plays at, and by the same stroke pocket his own, or force it over the table, HE loses the life, and not the person whose ball he pocketed.

8. Should the player strike the wrong ball, he pays the same forfeit to the person whose ball he should have played at, as he would have done if he had pocketed it.

9. If the striker miss the ball he ought to play at, and strike another ball, and pocket it, HE loses a life, and not the person whose ball be pocketed ; in which case, the striker's ball must be taken off the table, and both balls should remain in hand, until it be their turn to play.

10. If the striker, whilst taking his aim, inquire which is the ball he ought to play at, and should be mis-informed by any one of the company, or by the marker, he does not lose a life ; the ball must, in this case, be re-placed, and the stroke played again.

11. If information is required by the player, as to which is his ball, or when it is his turn to play, he has a right to an answer from the marker, or from the players.

12. When a ball or balls touch the striker's ball, or are in a line between it and the ball he has to play at, so that it will prevent him hitting any part of the object ball, they must be taken up until the stroke be played, and after the balls have ceased running they must be replaced.

13. If a ball or balls are in the way of a striker's cue, so that he cannot play at his ball, he can have them taken up.

14. When the striker takes a life, he may continue to play on as long as he can make a hazard, or until the balls are all off the table, in which latter case he plays from the baulk, or places his ball on the spot as at the commencement.

15. The first person who loses his three lives, is entitled to purchase, or, as it is called, to star (that being the mark placed against his lives on the board to denote that he has purchased) by paying into the pool the same sum as at the commencement, for which he receives lives equal in number to the lowest number of lives on the board.

16. If the first person out refuse to star, the second person may do it, but if the second refuse, the third may do it, and so on, until only two persons are left in the pool, in which case the privilege of starring ceases.

17. Only one star is allowed in a pool.

18. If the striker should move another ball whilst in the act of striking his own ball, the stroke is considered foul ; and if by the same stroke he pocket a ball, or force it off the table, the owner of that ball does not lose a life, and the ball must be placed on its original spot ; but if by that stroke he should pocket his own ball, or force it off the table, he loses a life.

19. If the striker's ball touch the ball he has to play it, he is then at liberty either to play at it, or at any other ball on the table, and it is not to be considered a foul stroke : in this case, however, the striker is liable to lose a life, by going into a pocket or over the table.

20. After making a hazard, if the striker should take up his ball, or stop it before it has done running, he cannot claim the life, or the hazard, from the person whose ball was pocketed ; it being possible that his own ball might have gone into a pocket if he had not stopped it.

21. If, before a star, two or more balls are pocketed by the same stroke, including the ball played at, each having one life, the owner of the ball first struck has the option of starring ; but should he refuse, and more than one remain, the persons to whom they belong must draw lots for the star.

22. Should the striker's ball stop on the spot of a ball removed, the ball which has been removed, must remain in hand until the spot is unoccupied, and then be replaced.

23. If the striker should have his next player's ball removed, and stop on the spot it occupied, the next player must give a miss from the baulk to any part of the table he thinks proper, for which miss he does not lose a life.

24. If the striker has a ball removed, and any other than the next player's ball should stop on the spot it occupied, the ball removed must remain in hand till the one on its place be played, unless it should happen to be the turn of the one removed to play before the one on its place, in which case that ball must give place to the one originally taken up ; after which it may be replaced.

25. If the corner of the cushion should prevent the striker from playing in a direct line, he can have any ball removed for the purpose of playing at a cushion first.

26. The two last players cannot star or purchase ; but they may divide, if they are left with an equal number of lives each ; the striker, however, is entitled to his stroke before the division.

27. All disputes to be decided by a majority of the players.

28. The charge for the play to be taken out of the pool before it is delivered up to the winner.

THE NEAREST BALL POOL.

In this Pool the players always play at the nearest ball out of the baulk : for in this Pool, the baulk is a protection.

1. If all the balls be in the baulk, and the striker's ball in hand, he must lead to the top cushion, or place the ball on the winning and losing spot.

2. If the striker's ball be within the baulk-line, and he has to play at a ball out of the baulk, he is allowed to have any ball taken up that may chance to lie in his way.

3. If all the balls be within the baulk, and the striker's ball not in hand, he plays at the nearest ball.

All the other rules of the former Pool are to be observed at this.

RULES TO BE OBSERVED AT THE PYRAMID GAME.

1. This game may be played with any number of balls, but it is generally played with sixteen ; viz. fifteen red, and one white.
2. At the commencement, the coloured balls are to be placed on the table, in the form of a triangle, the first ball to stand on the winning-spot which will form the point of the triangle nearest to the centre of the table.
3. If only two persons play, the players to string for the choice of lead—the leader to place his ball (the white) within the semi-circle at the baulk, and to play at the coloured balls.
4. If more than two persons play, and the number is odd, each must play alternately ; the rotation to be decided by stringing, or by drawing numbers out of a bag, which should be kept by the marker for that purpose.
5. If the number of players is even, they may form sides, when the partners may play alternately, or go out upon a hazard, miss, &c. being made, as may be previously agreed upon.
6. The next player plays with the white ball from the spot on which it was left by his opponent, except it should be off the table ; in which case he plays from the baulk as at the commencement.
7. None but winning hazards can be made, and the same rules are generally to be observed as at common Pool.
8. The Player who pockets the greatest number of balls wins the game.
9. If the player give a miss—pocket the white ball, or force it over the table, he loses one ; that is to say, he must place one of the coloured balls, which he has pocketed, on the winning spot, if unoccupied ; if not, it must be placed in a direct line behind it.

10. If the striker hole his own ball, or force it over the table, and at the same time pocket one or more of the coloured balls, or force THEM over the table, or move any ball in taking aim or striking, he loses all he might otherwise have gained by the stroke; the coloured balls so removed, must be replaced, on the table, together with one of the striker's balls as a penalty.

11. Should the striker losing a ball, not have taken one, the first he holes must be placed on the table as in rule 9; should he not take one during the game, he must pay for each ball so forfeited, as much as he is playing for per ball.

12. If the white ball touch a coloured one, the player, may score all the coloured balls he pockets—he cannot give a miss.

13. If the striker force one or more of the coloured balls over the table, he scores one for each, the same as if he had pocketed them.

14. If the game is played with an even number of balls, the last hazard counts but one; if with an odd number, it counts two.

15. When all the coloured balls but one are pocketed, the player who made the last hazard continues to play with the white ball, and his opponent with the red, alternately, as at single Pool.

16. At the end of the game, the player who has pocketed the greatest number of balls, is entitled to receive from each of the others the difference between their number and his; a certain sum per ball having been agreed upon at the commencement.

17. When only two balls are on the table, and two persons playing, should the striker hole the ball he is playing with, or make a miss, the game is finished; if there are more than two players, and they not partners, the striker places a ball on the spot as in rule 9.

PYRAMID POOL.

1. This game is played with fifteen balls; viz. fourteen red and one white.

2. At the commencement the balls are placed on the table in the shape of a triangle, the first ball to stand on the winning spot, which will form the centre of the table. The middle ball in the last row (which must always be the white ball) must be taken out, and played with, from the baulk.

3. No. 1 plays from the baulk ; if he makes a winning hazard he continues to play on till he has done scoring ; but if he pocket his own ball, or force it off the table, and by the same stroke pocket any or either of the other balls, the ball or balls so pocketed, are placed on the table on the winning spot, or, if occupied, as near to it as possible, in a line with the centre of the table and the first ball he takes during the game is forfeited and placed also on the winning spot. No. 2 then plays on.

4. A player loses a ball by pocketing the ball he plays with, by forcing it over the table, by missing all the balls, by playing with the wrong ball, or out of his turn ; in either case he pays one ball to the person who played before him, one is taken from his score, and the next player proceeds.

5. When only two balls are left on the table, the game becomes single Pool, and he who takes the last ball wins the Pool.

Rules 3, 4, 6, 11, 12, 13 and 14 in the Pyramid game are to be observed also at Pyramid Pool.

THE GAME OF SKITTLE POOL.

1. This game is played with the three billiard balls, and twelve skittles, ten white, and two black, all of which are placed on the table according to the diagram below.

2. The game is thirty-one up.

3. The rotation of the players is decided by numbered counters drawn from a bag, one by each player, and each player has one stroke alternately, according to his rotation.

4. Any number of persons can play, and the following order must be strictly attended to ;—viz., the balls and skittles being placed in their proper position by the marker, No. 1 plays either the white ball, or spot white ball out of baulk, aiming at the red ball which he *must* strike before hitting a skittle, or he cannot score. No. 2 plays with the remaining white ball at either of the other balls, unless the remaining white ball has been removed by the first player, in which case he, No. 2 (as well as the following players), plays at, and with either of the three balls at discretion.

5. The player scores the number which is placed opposite the skittle which he displaces, except it be a *black* one, in which case he loses his life, but can purchase another by paying the same amount into the pool as at first, which he can do as often as he pleases during the game if he signifies the same before the next player has made his stroke, but he comes in without any points he may have previously made.

6. Any person who knocks down a black pin (*after making his stroke*) with a ball, cue, his sleeve, or in any other way, loses his life, and can only join in the game again by purchasing, as in rule 5.

7. Any skittle, or skittles having been removed by a player, must be replaced before the next player makes his stroke.

8. Any ball occupying the place of a fallen skittle must be placed on its own proper spot, as at the commencement of the game, unless any other ball occupies that position, in which case each must be placed on its own proper spot.

9. Any skittle is considered to be down if it is entirely off its spot, or is leaning against a ball, cushion, or other skittle.

10. Any one playing out of turn cannot score any points which he would otherwise have made, and the following player takes *his* stroke without replacing the Ball—but the former has the right to play in his turn, if he has not lost his life by removing a black skittle.

11. Foul strokes are made by the following means—viz., by pushing a ball instead of striking it—by knocking down a white pin, without striking a ball first, or before the balls have ceased running—by playing out of turn—when all the skittles are not in their places—or the three balls are not on the table—running in or jumping off the table is not foul. Any one making a foul stroke cannot score.

12. If by mistake the black and white skittles are wrongly placed and a stroke is made, the white scores, and the black counts as dead; but the skittles must then be placed in their proper position.

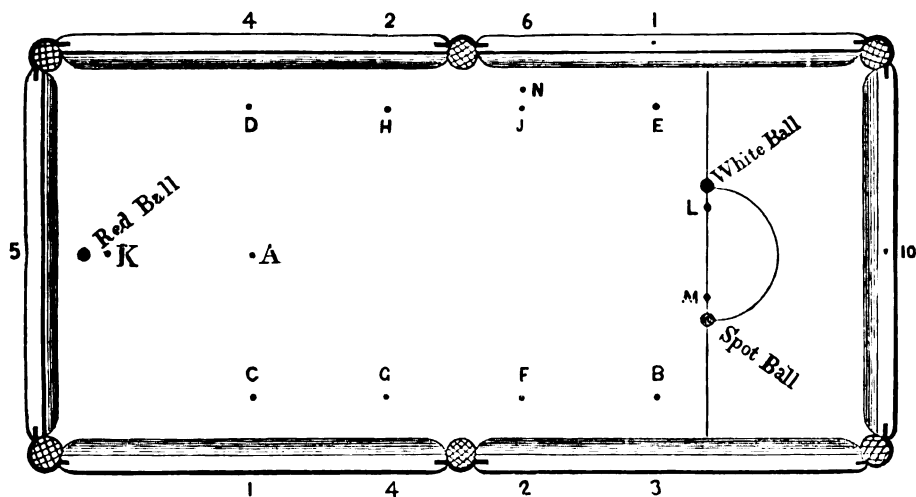
13. Should the three balls be so covered by the pins as to prevent their being played at, the red ball can be spotted after one miss has been given, and if they are then covered, the spot ball can be spotted—a miss cannot be given to benefit the next player.

14. Any one not being present at the commencement of the pool, has the right to join in it, provided no player has then made more than one stroke.

15. Any one purchasing a life and not having his stroke, has his purchase money returned.

16. The charge for the game to be deducted from the Pool before it is handed over to the winner..

Directions for placing the skittles and balls used in the game of Skittle Pool.



The white pins or skittles at B and E are to be placed 9 inches from the baulk line, and those at C and D on similar spots at the other end of the table in a line with the pyramid spot, A.

The space between B and C, and D and E, must then be divided into three equal parts, and on the four points thus obtained, place white pins, F, G, H, J. Place one white pin at K, and another on the baulk line at L, (this pin counts ten) a black one at M on the baulk line also (the distance for these two pins to be four inches from the spots in baulk.) Place the remaining black one at N at an equal distance between the cushion and the pin at J.

The set of billiard balls are also to be placed as follows, viz., the white, and spot white balls on the spots in baulk, and the red ball at an equal distance between the cushion and pin K.

N.B. After the position of the pins has been obtained, the places can be marked by black plaister spots on the cloth. The number opposite each pin shows the number of points that it counts.

All the pins or skittles round the sides or end of the table are to be placed their own length (say four inches) from the cushion.

FOREIGN GAMES.

THE game of Billiards, as we have already had occasion to remark, admits of great, and, indeed, of almost endless variation; and hence in all the different countries of Europe we find it played in a different manner,—no one country playing it exactly like another. The French play it with three balls: but the winning game only; the Russians, the Swedes, the Danes, and some others, play it with five balls; the Spaniards play it with three balls and five pins (like skittle pins); and the Americans, again, differing from others, play it with four balls.

THE FRENCH GAME.

This game is much the same as our “winning” game, except that the players are not confined to the half-circle in the baulk; and when the ball is in hand, they must stand within the limits of the corner of the table. But the favourite game of the French, and the one in which they excel, is the “doublet” game.

THE RUSSIAN GAME.

This game is played with five balls, and there are several ways of playing it,—as, pocketing the balls in the respective pockets, according as they are placed; the canon counting two, three, four, &c., according to the ball from which it is made; following the stroke after making a canon; not following the stroke after making a canon; the winning game; the losing game; &c., &c.

The following is the general way of playing it in this country:

The balls are two white ones, and a red, a blue, and yellow one. The red ball is placed on the winning game spot; the blue on the centre of the baulk-line, and is considered in baulk; and the yellow in the centre of the table, immediately between the two middle pockets.

The game is forty in number, and is scored by winning hazards, canons, and forfeits.

The red ball may be pocketed in any pocket, and scores three; the blue may be pocketed in any pocket, and scores four; the adversary's ball may be pocketed in any pocket, and scores two; the yellow ball must be pocketed in the middle pockets only, and scores six; a canon scores two: but there is no following canons.

1. The striker, in leading off, may place his ball anywhere within the stringing line.

2. When the ball is in hand, the player is not confined to the half-circle, but may place his ball anywhere within the stringing line.

3. In leading off, the striker must play his ball out of the baulk, to any part of the table he chooses: and his adversary must play the first stroke at the white ball.

4. If the striker pocket his own ball, he loses according to the ball he strikes at,—namely, four for the blue, six for the yellow, two for the white, and three for the red.

5. The striker, by pocketing his own ball, loses all the points that he made by the stroke: so that it would be possible for him to lose twenty-one points by one stroke; that is, if he played at the yellow ball, made a canon, and pocketed all the balls.

THE AMERICAN, OR FOUR-BALL GAME.

This game is played with four balls: two white ones, a red one, and a blue.

The game is thirty-one up, and is scored by winning hazards and canons.

The blue ball is placed in the centre of the baulk-line, and is considered in the baulk; and the red is placed on the winning spot. Pocketing the blue ball scores four; the red ball scores three; and the white one scores two. A canon from the red to the blue, or from the blue to the red, scores three points; from the red, or the blue, to the white, two points; from the white, to the blue, or red, two points; from the blue to the white, and afterwards to the red, four points; from the red to the white and blue, four points; from the blue to the red and white, five points; and from the red to the blue, and afterwards to the white, five points: these being double canons.

1. The person who leads plays his ball out of baulk to any part of the table he chooses,—but without striking a ball; and the adversary plays his first stroke at the white ball.

2. If the striker, in leading off, should strike a ball, his adversary may compel him to lead again, or have the ball so struck replaced, and the white (or striker's ball) must remain where it is.

3. If the striker pocket his own ball, he loses two, three, or four, according to the ball he struck first.

THE SPANISH GAME.

This game is played with three balls, and five wooden pins, which are set up in the centre of the table between the two middle pockets, about two inches and a quarter apart.

The game is thirty-one up; and is scored by winning hazards and canons (the same as in the English winning game), and by knocking down the pins.

1. If the striker, after striking a ball, should knock down a pin, he gains two points; if he knock down two pins, he gains four points; and so on, scoring two points for every pin he knocks down. If he knock down the middle pin alone, he gains five points; but should he knock them all down at one stroke, he wins the game.

The balls are two white ones, and a red, a blue, and yellow one. The red ball is placed on the winning game spot ; the blue on the centre of the baulk-line, and is considered in baulk ; and the yellow in the centre of the table, immediately between the two middle pockets.

The game is forty in number, and is scored by winning hazards, canons, and forfeits.

The red ball may be pocketed in any pocket, and scores three ; the blue may be pocketed in any pocket, and scores four ; the adversary's ball may be pocketed in any pocket, and scores two ; the yellow ball must be pocketed in the middle pockets only, and scores six ; a canon scores two : but there is no following canons.

1. The striker, in leading off, may place his ball anywhere within the stringing line.

2. When the ball is in hand, the player is not confined to the half-circle, but may place his ball anywhere within the stringing line.

3. In leading off, the striker must play his ball out of the baulk, to any part of the table he chooses : and his adversary must play the first stroke at the white ball.

4. If the striker pocket his own ball, he loses according to the ball he strikes at,—namely, four for the blue, six for the yellow, two for the white, and three for the red.

5. The striker, by pocketing his own ball, loses all the points that he made by the stroke : so that it would be possible for him to lose twenty-one points by one stroke ; that is, if he played : the yellow ball, made a canon, and pocketed all the balls.

THE AMERICAN, OR FOUR-BALL GAME.

This game is played with four balls : two white ones, a red and a blue.

The game is thirty-one up, and is scored by winning hazards and canons.

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2. If the striker pocket the red ball, he gains three points for that; and two for each pin he may knock down at the same stroke.

3. If the striker pocket the white ball, he gains two points for that, and two for each pin he may knock down.

4. If the striker knock down the pins with his own ball, before striking another ball, he loses two for every pin he knocks down.

5. If the striker pocket his own ball from another ball, he loses all the points he would otherwise have made by the stroke: for instance, if he play at the red ball, pocket it, and make a canon, and, at the same time, knock down two pins, he loses twelve points; namely, three for the red, two for the canon, two for each pin, and three for his own ball going in from the red.

6. If the striker cause his own ball to fly off the table, he loses three points.

All the rules concerning strokes, &c., at the “winning and losing” game may be observed at these games.

FINIS.

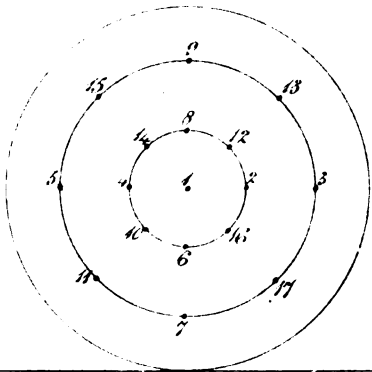
The Position of the Player.

Plate I.



Fig. 1.

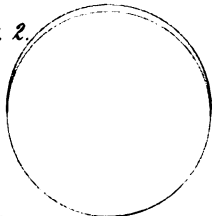
The Ball, with
the seventeen



different points
from which it may
be struck.

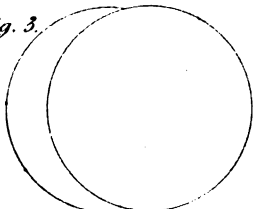
Full ball.

Fig. 2.



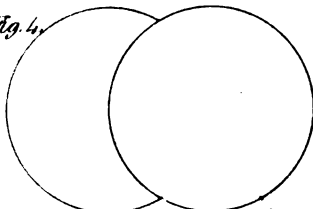
Three-quarter ball.

Fig. 3.



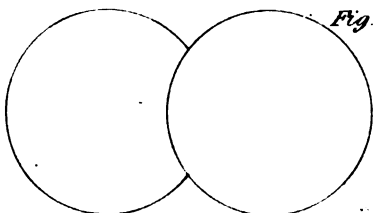
Half ball.

Fig. 4.



Quarter ball.

Fig. 5.



Fine ball

Fig. 6.

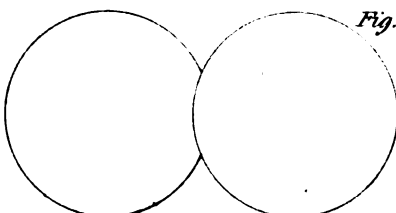
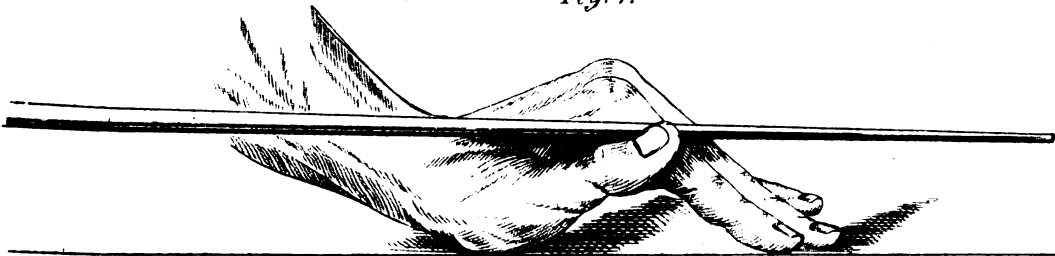
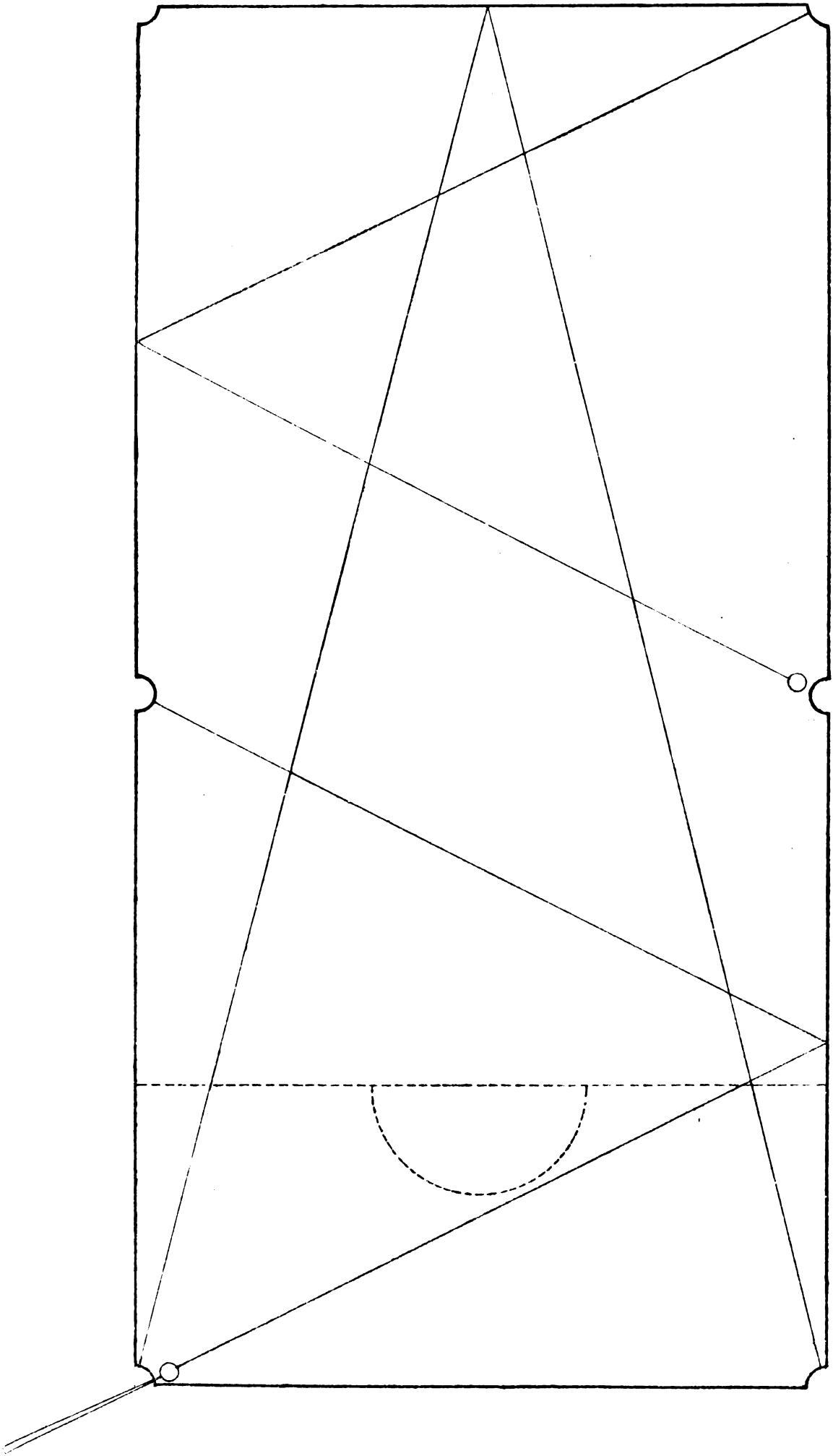


Fig. 7.



On the method of forming the Bridge.



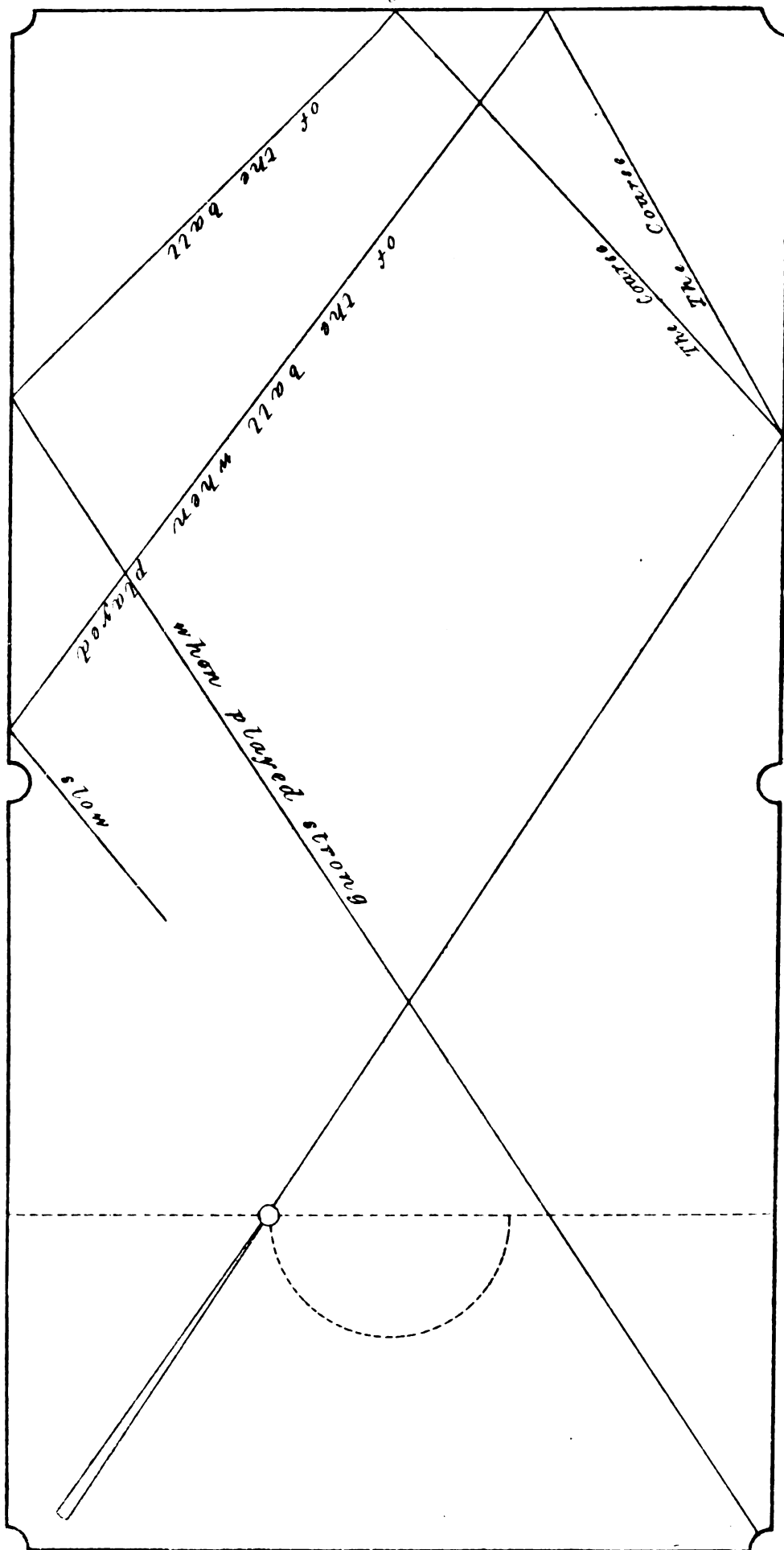


Fig. 3. •

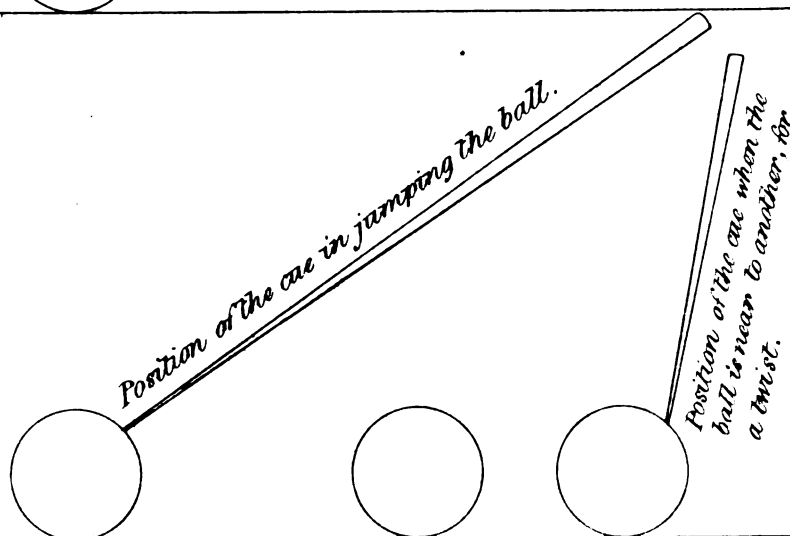
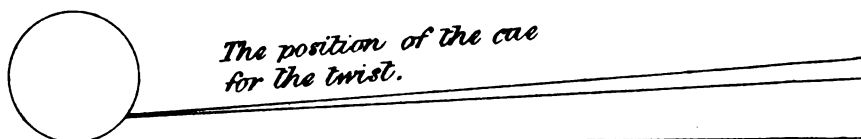
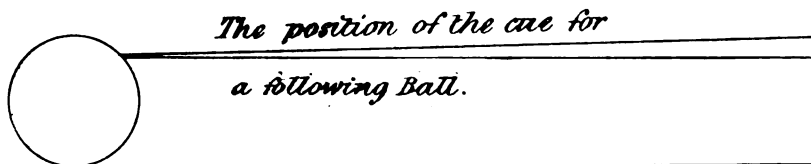
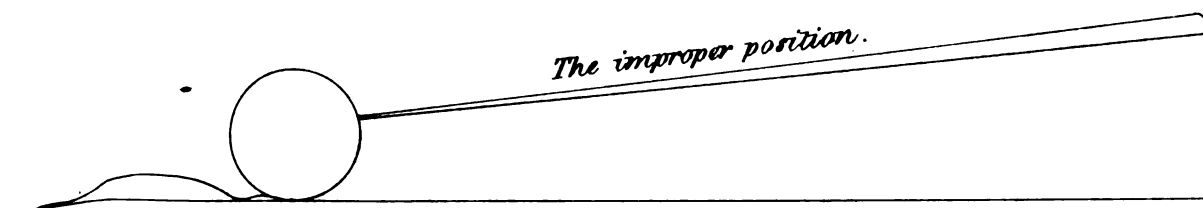
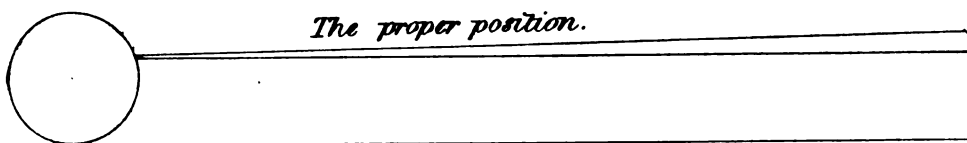
Fig. 2. •

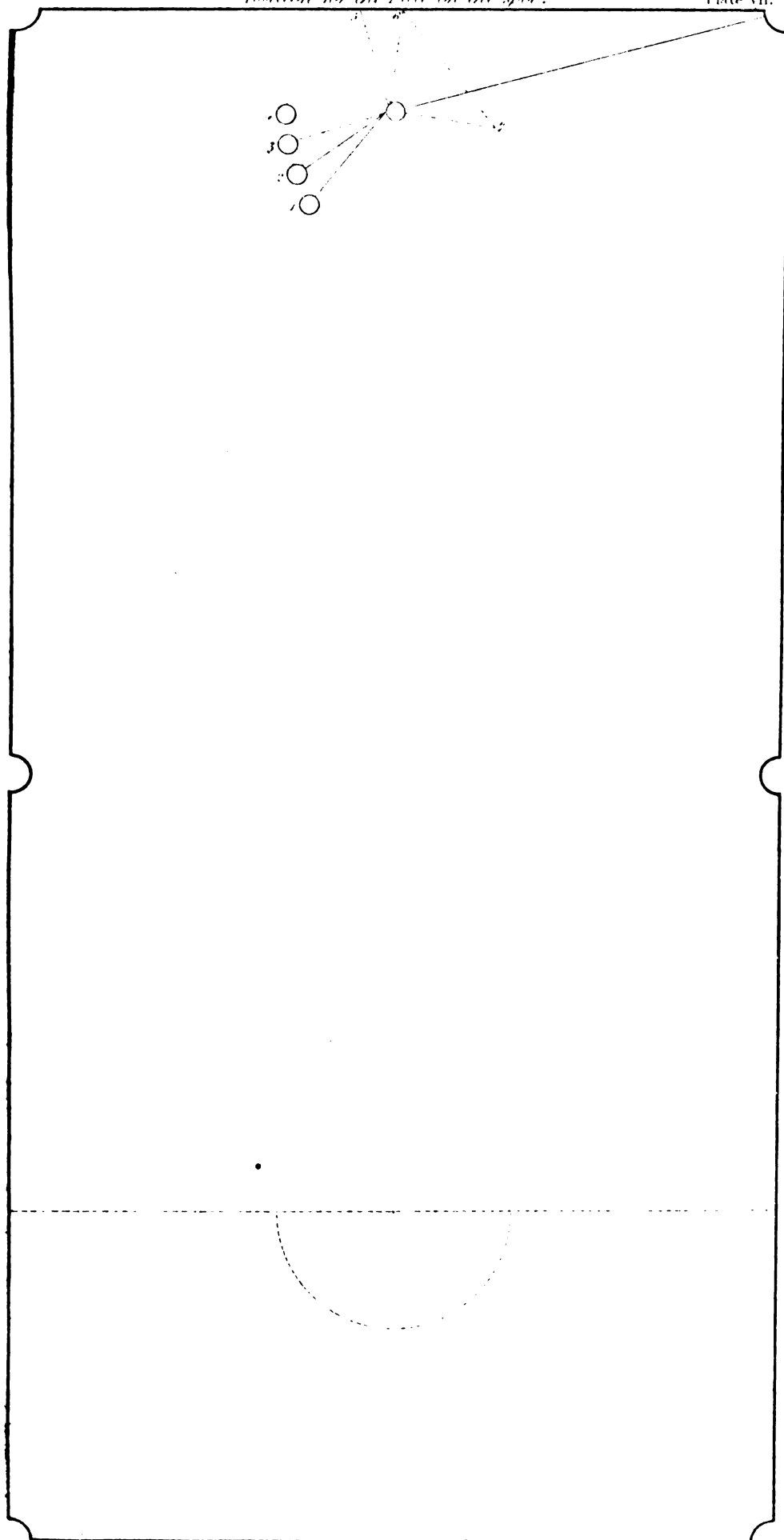
Fig. 4.

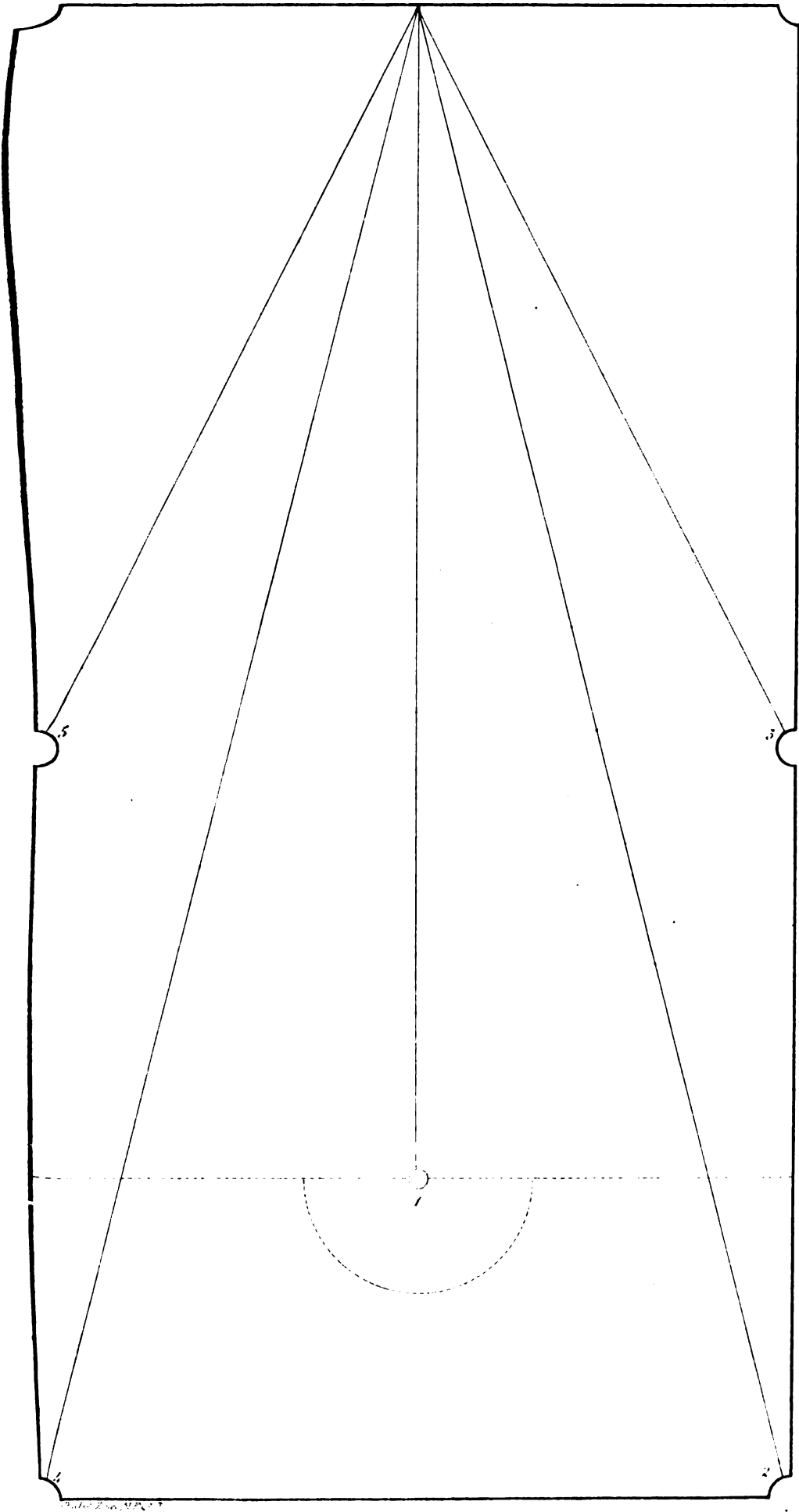
Fig. 1.

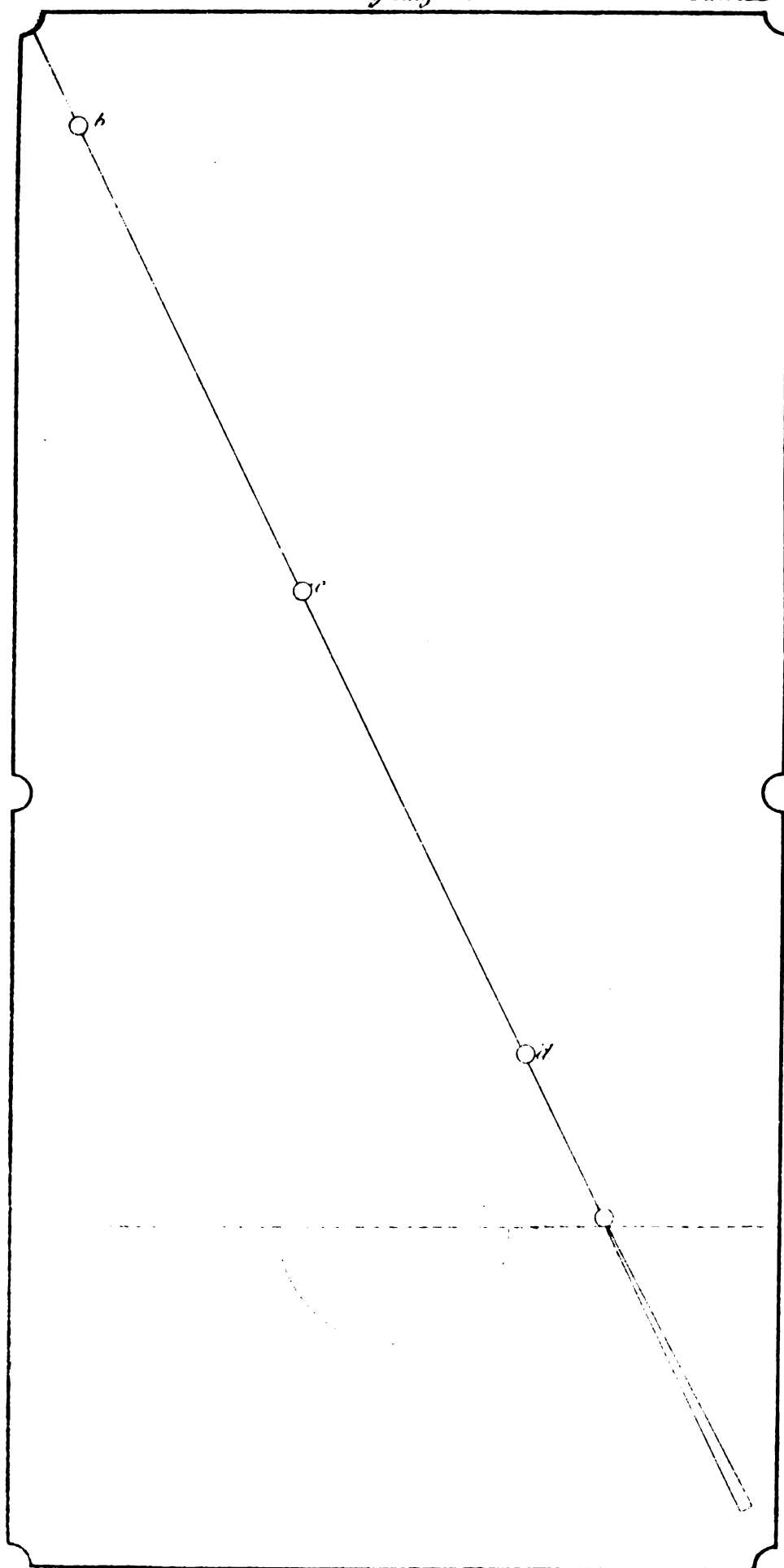
The Positions of the Cue.

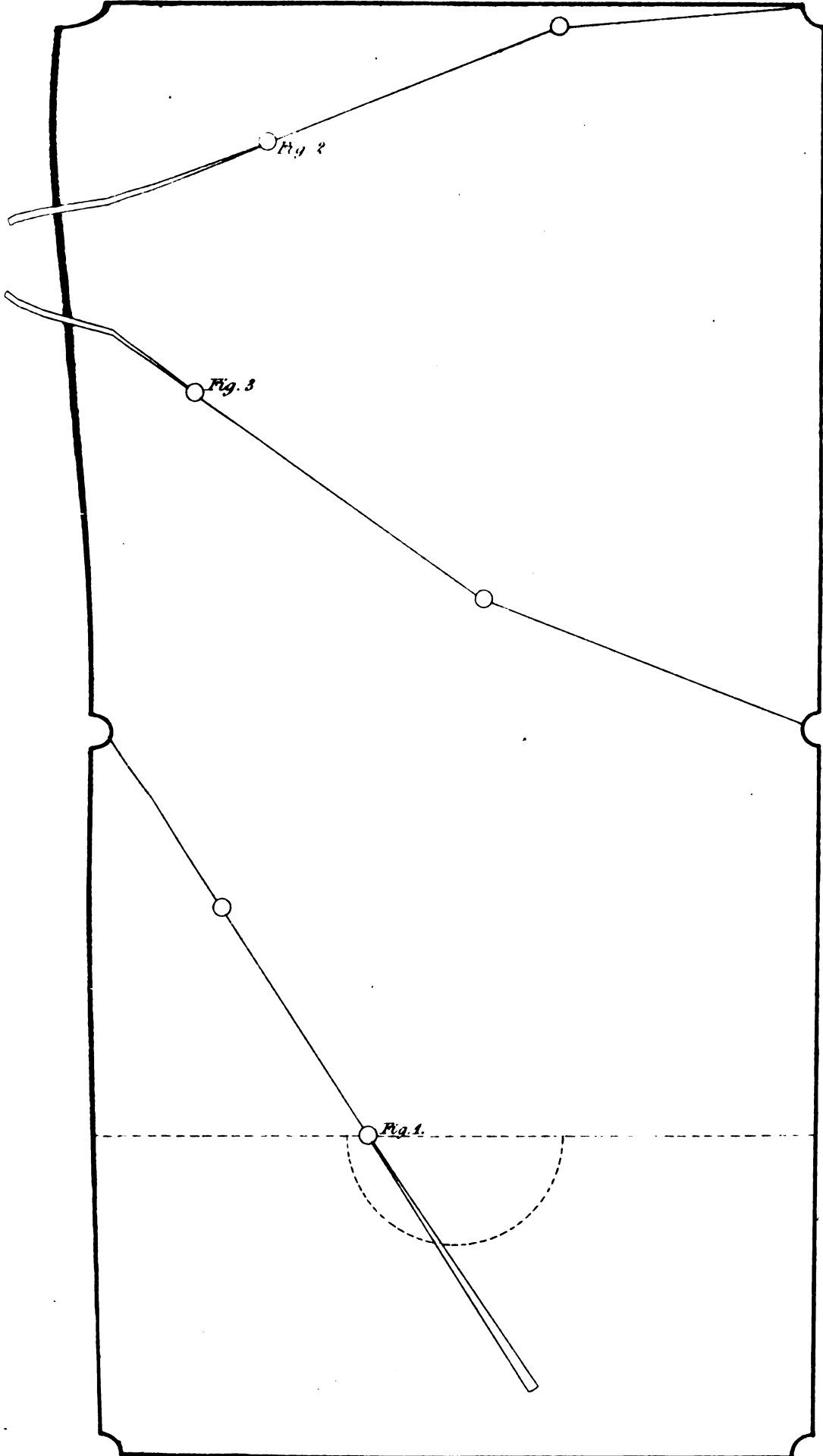
Plate VI.

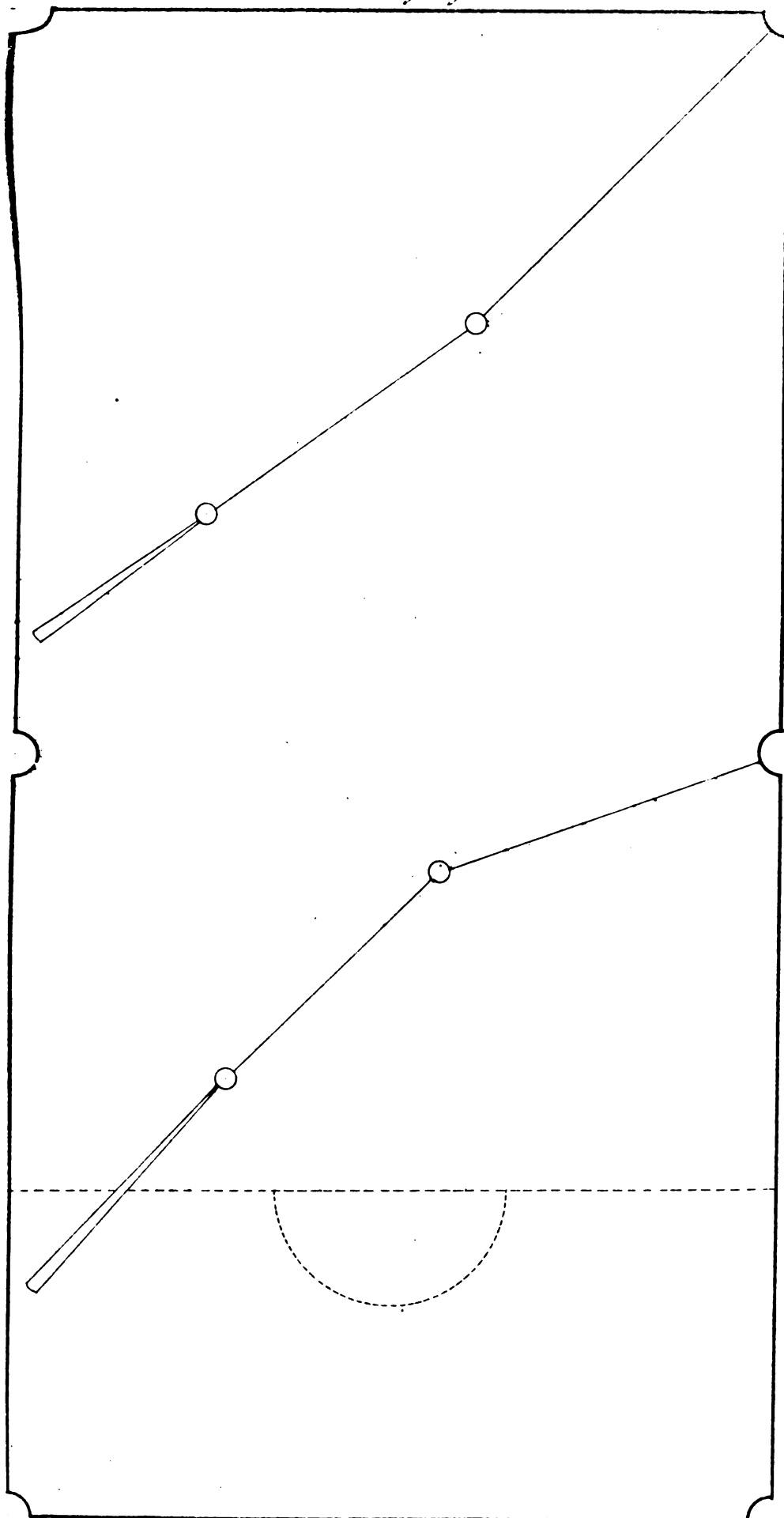


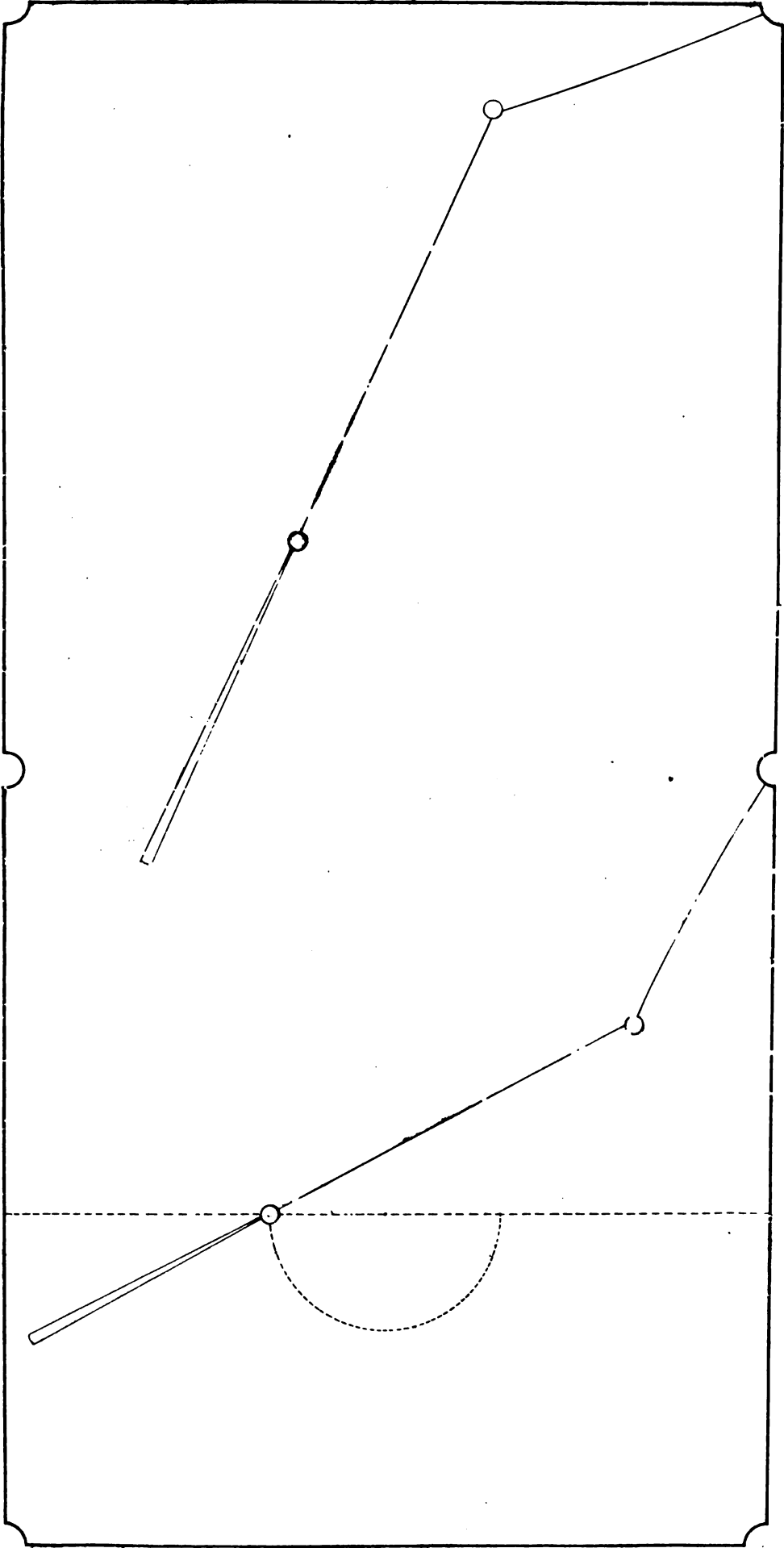


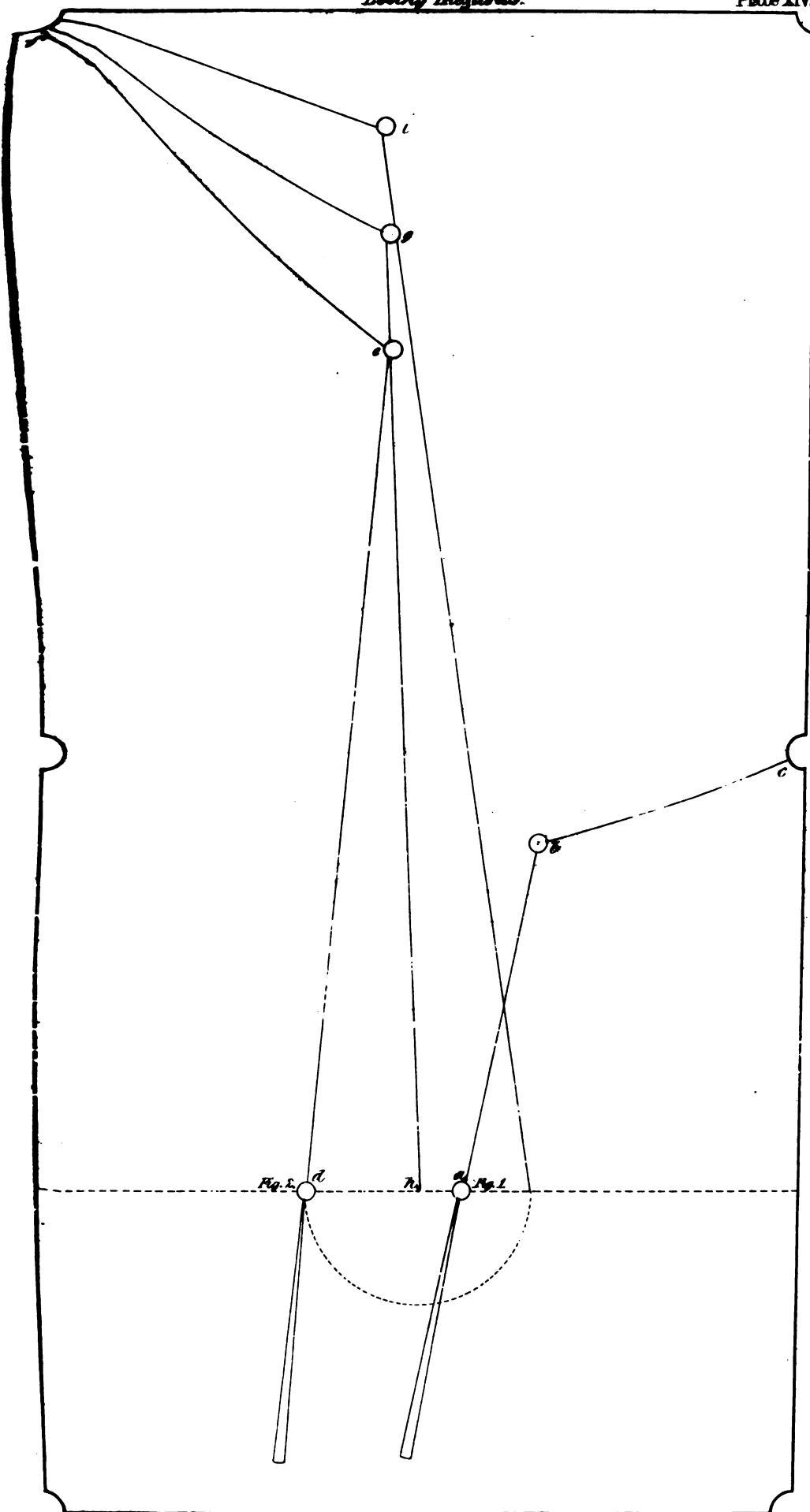


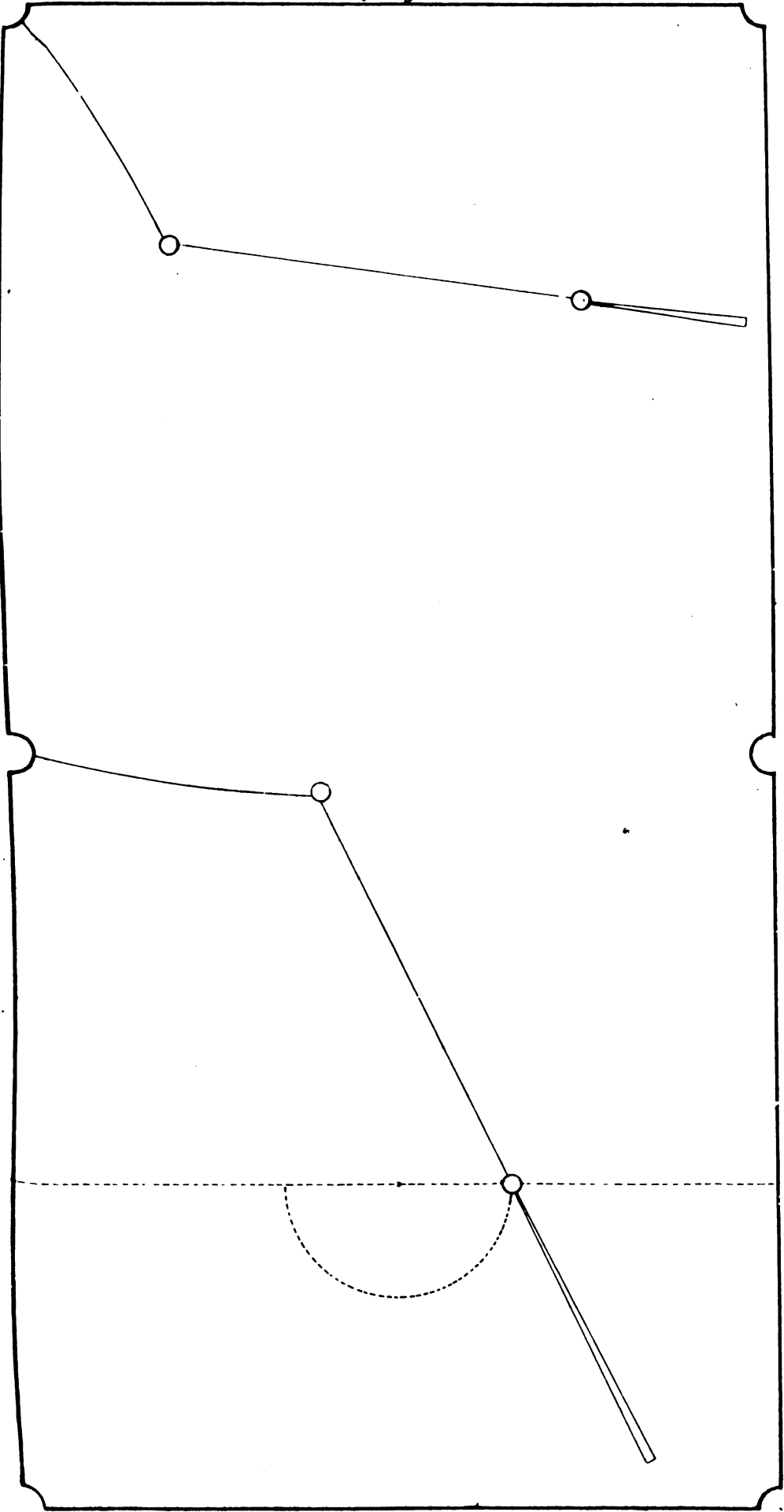


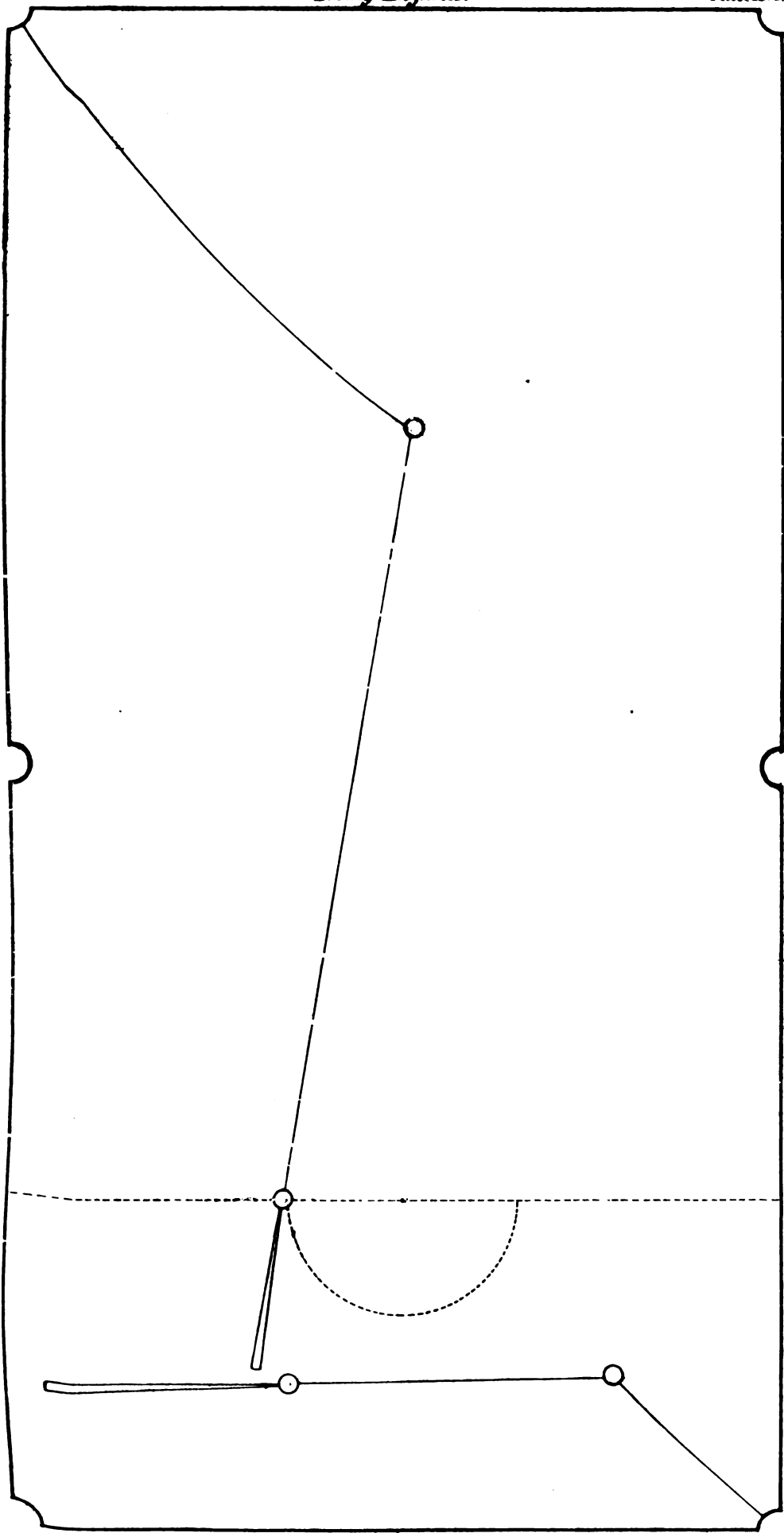


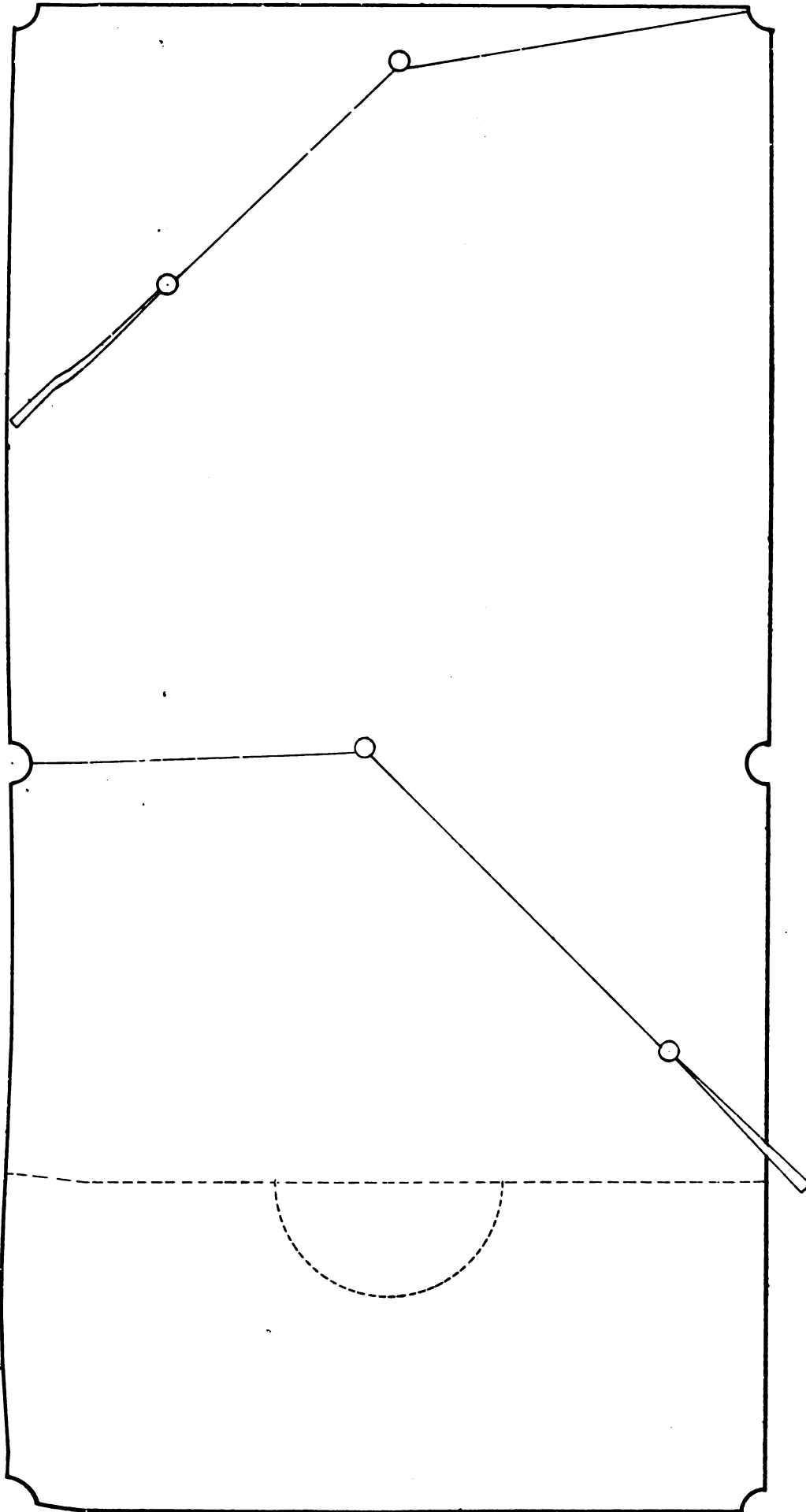


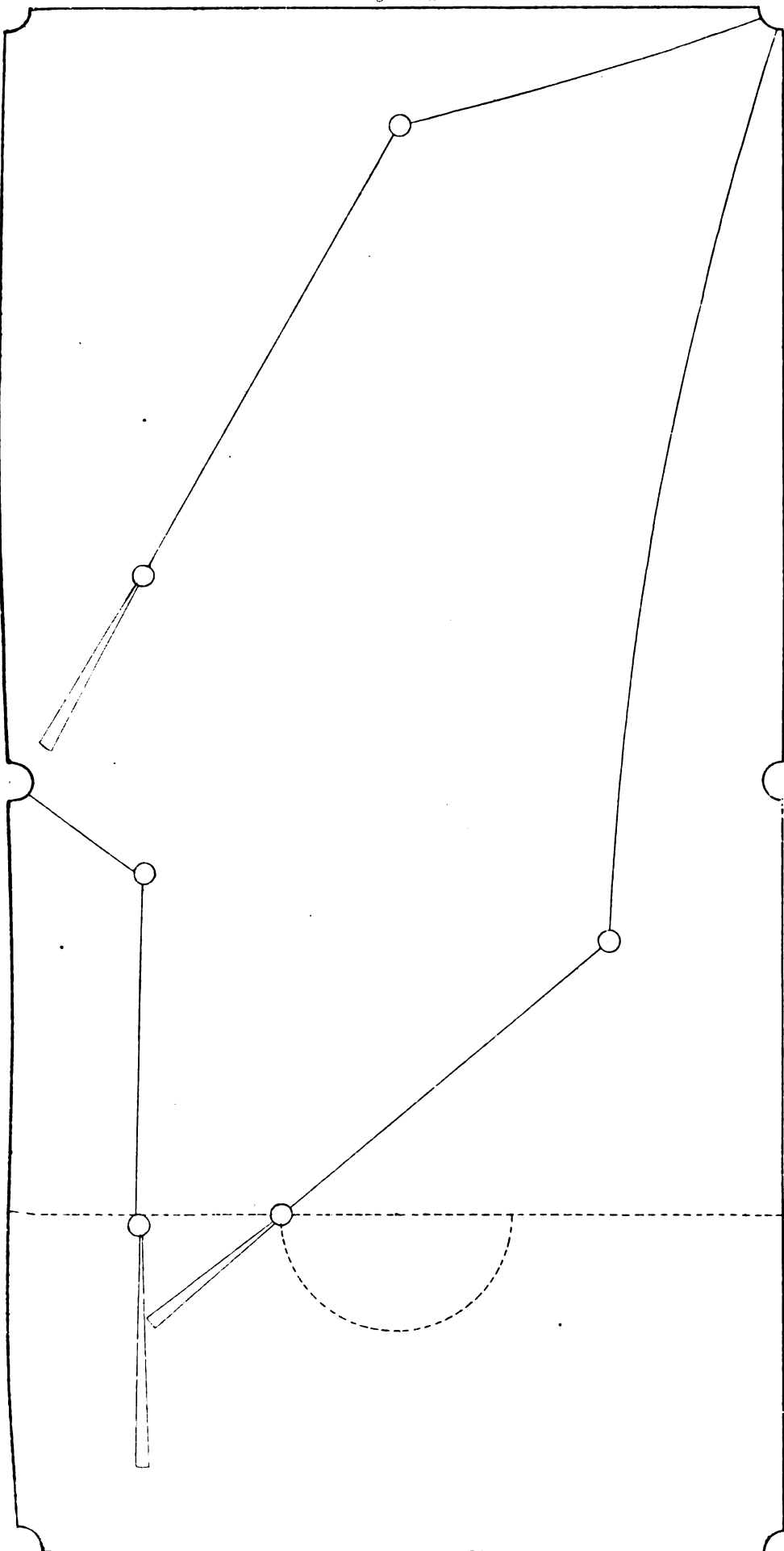


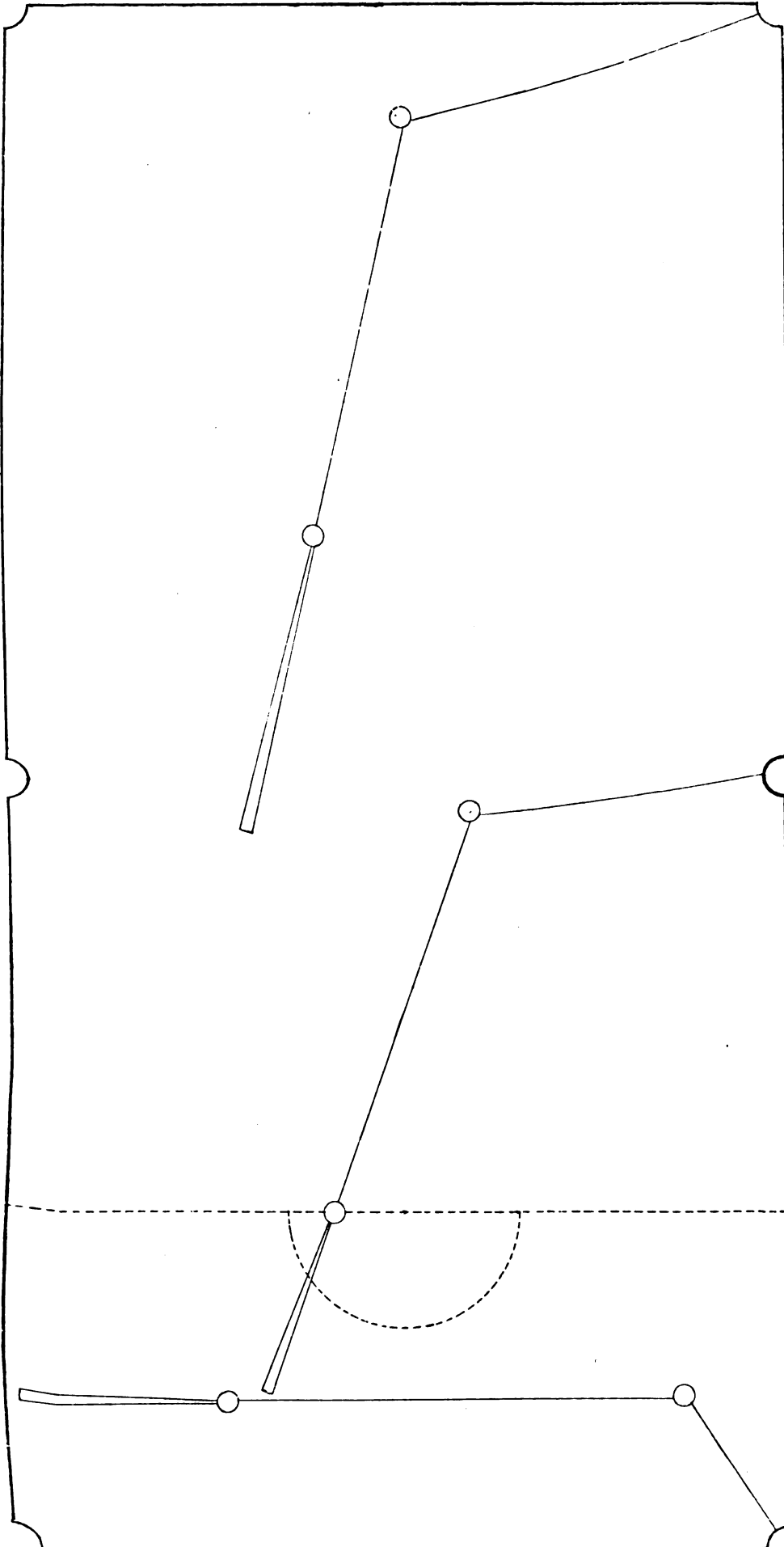


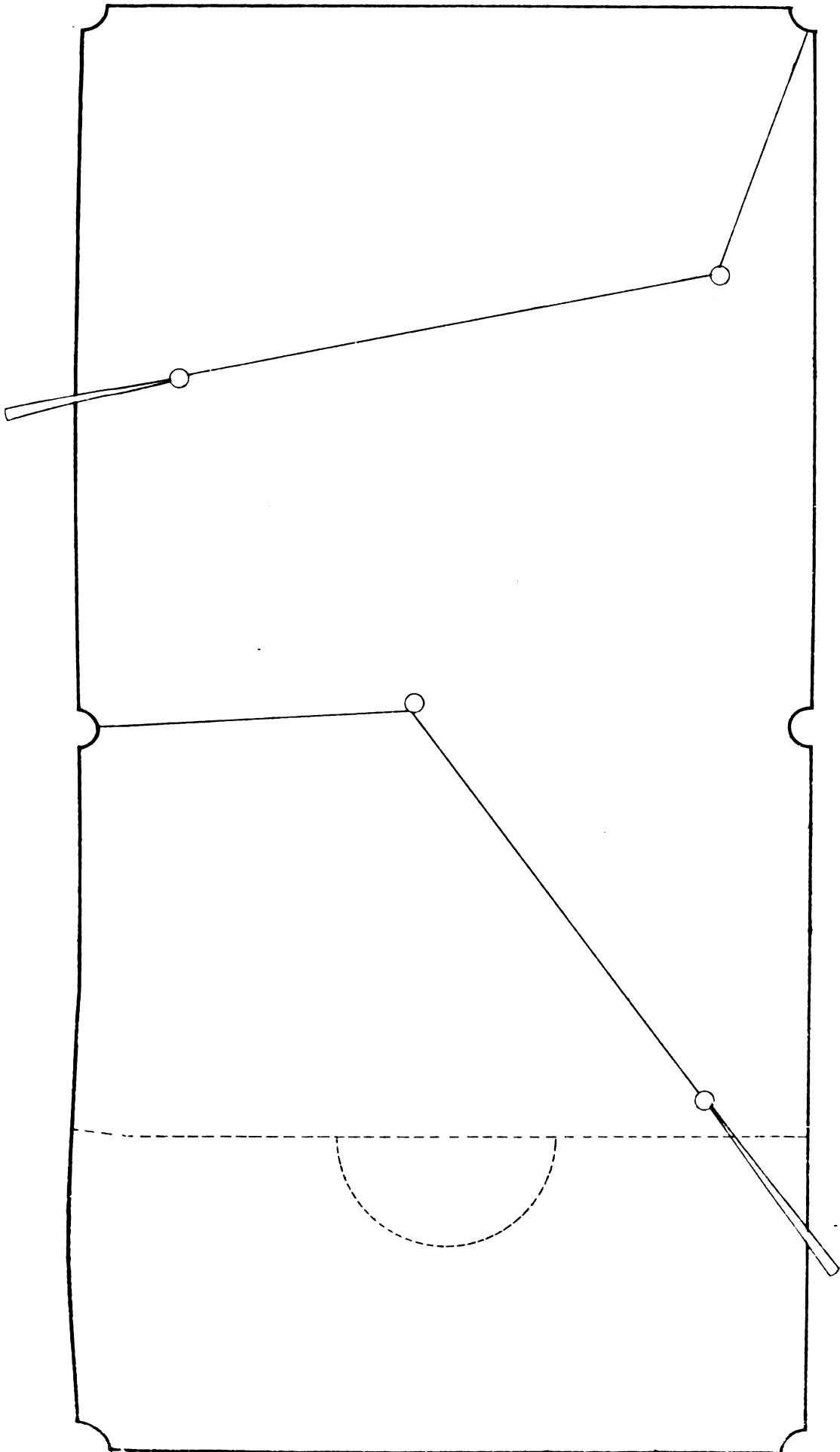


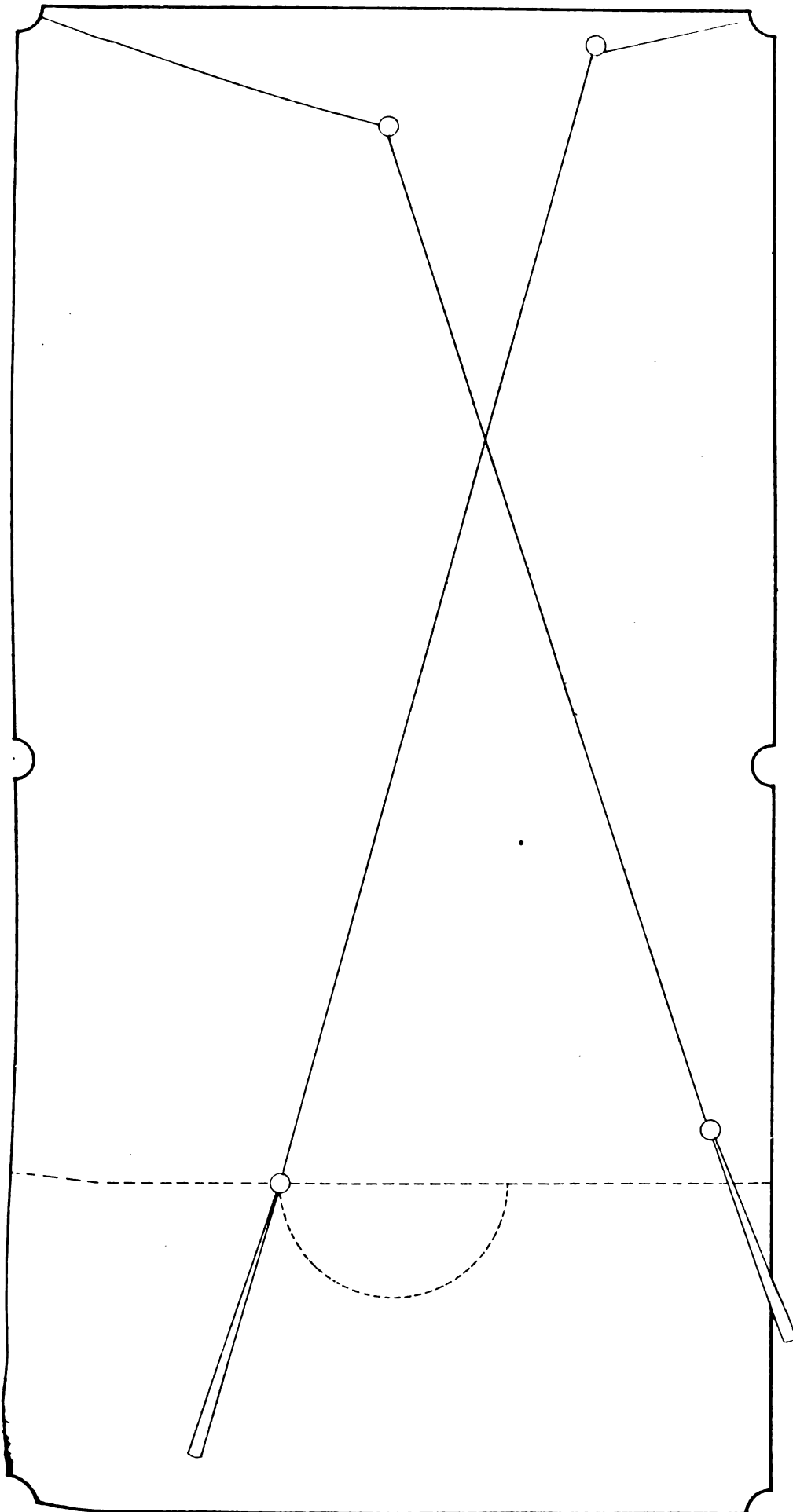


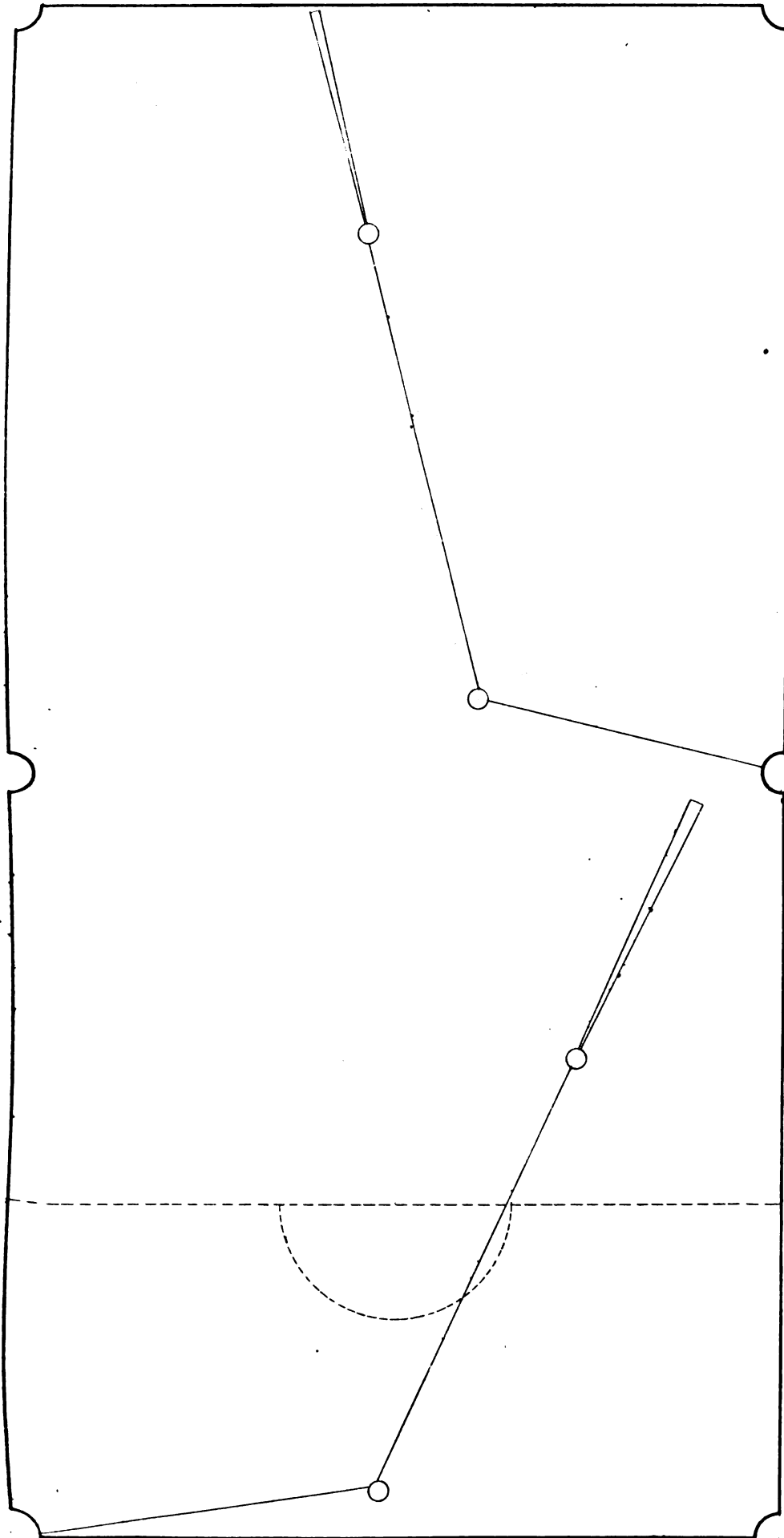




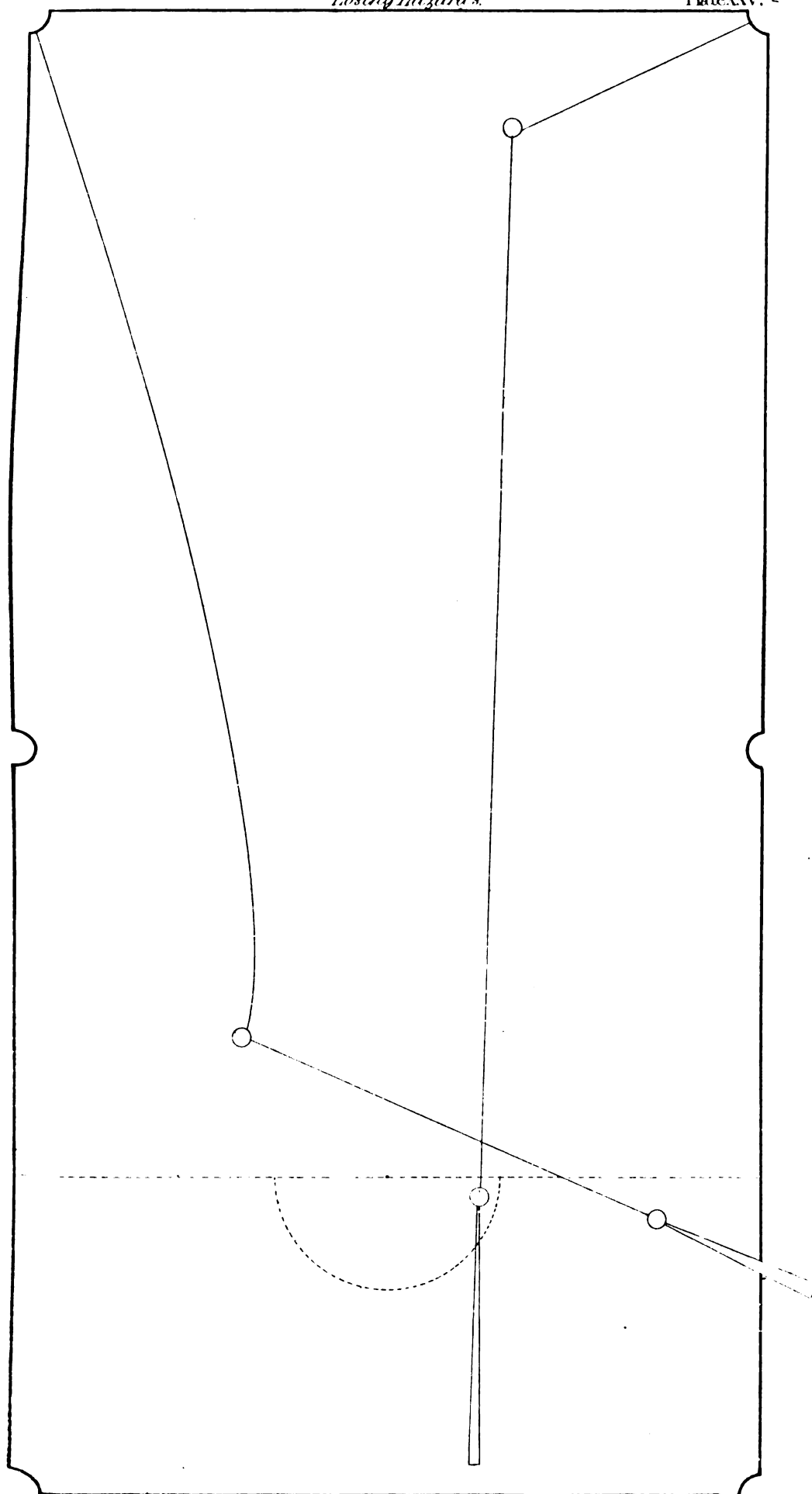


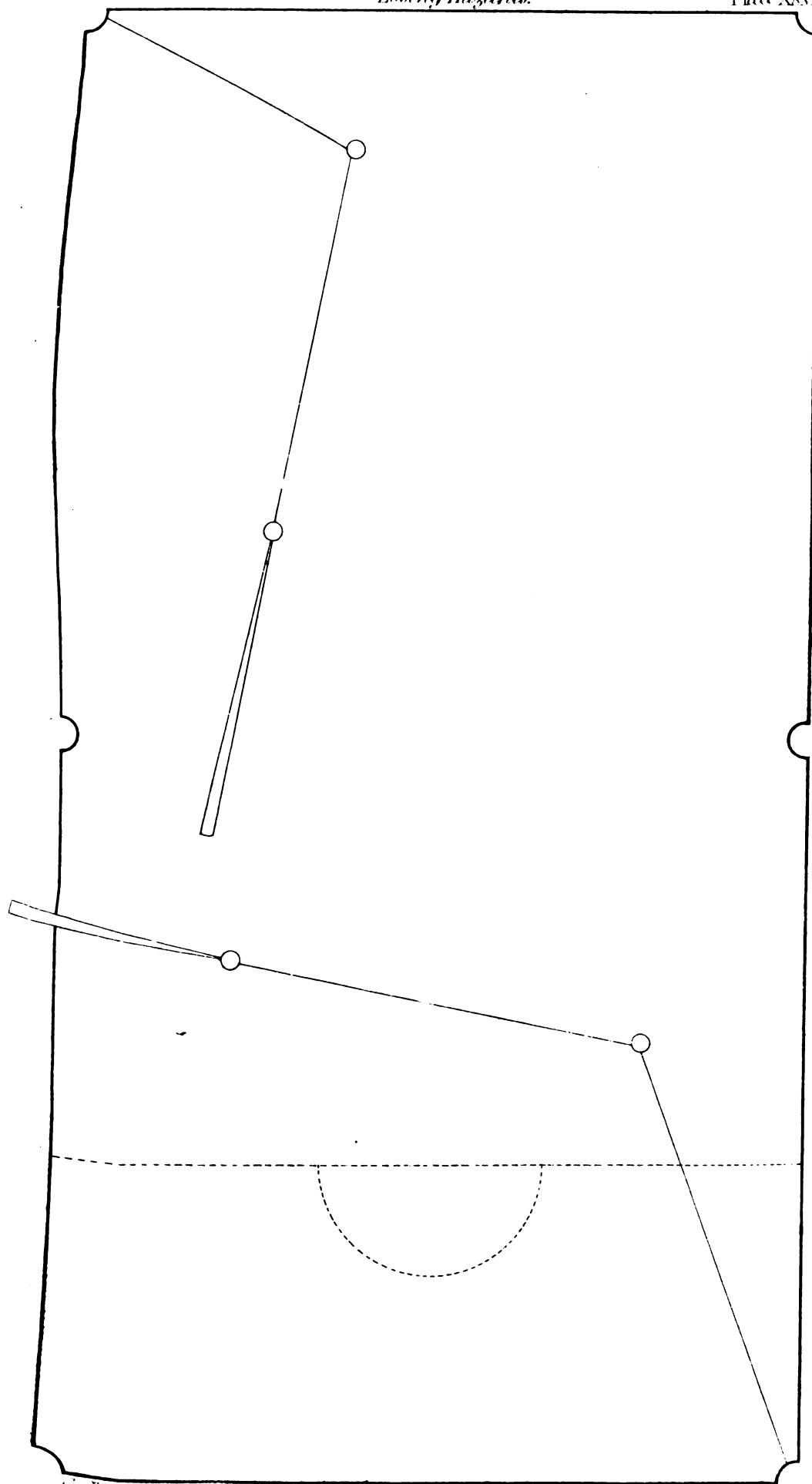




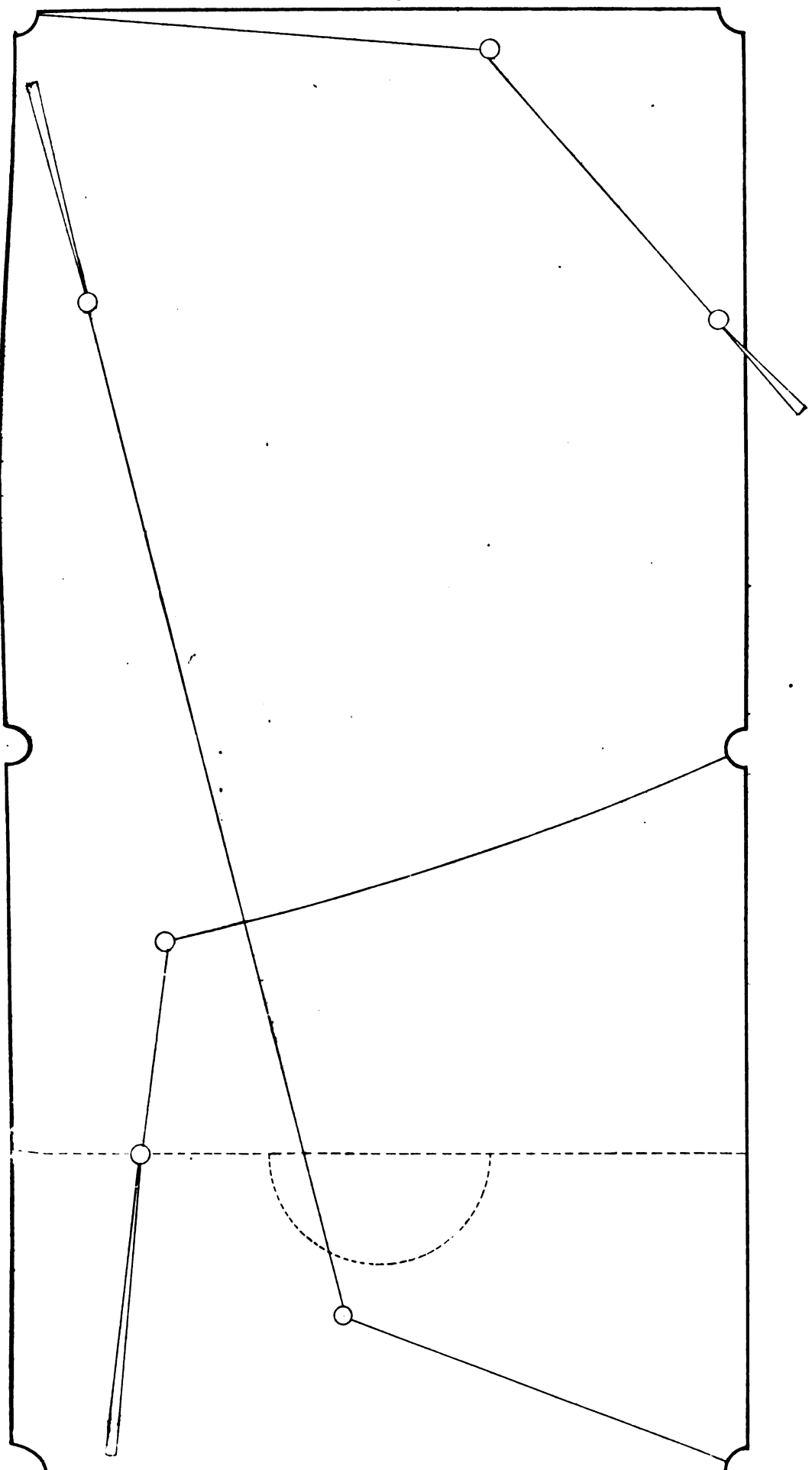


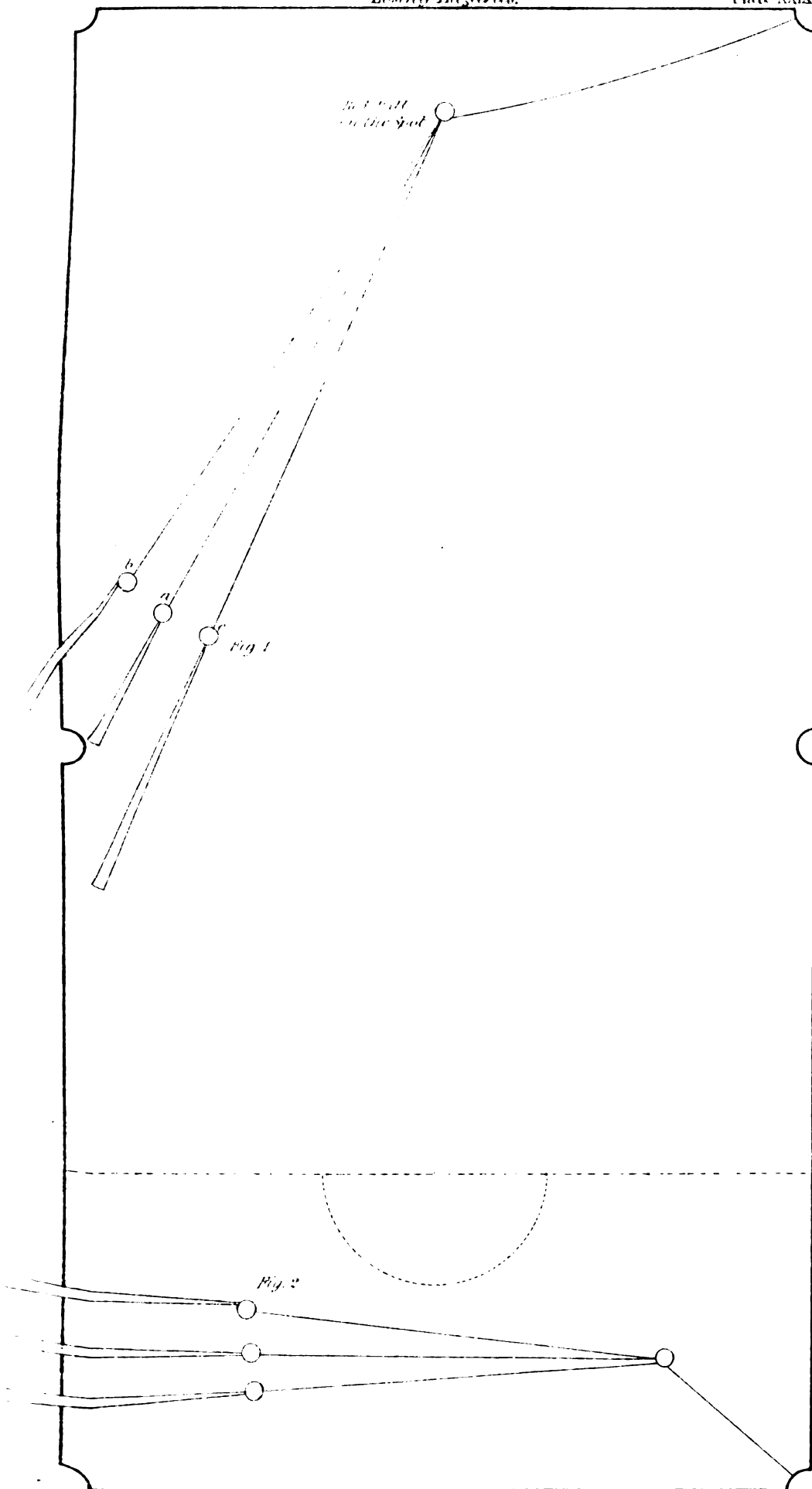
White ball, Black, 61, Feet 81

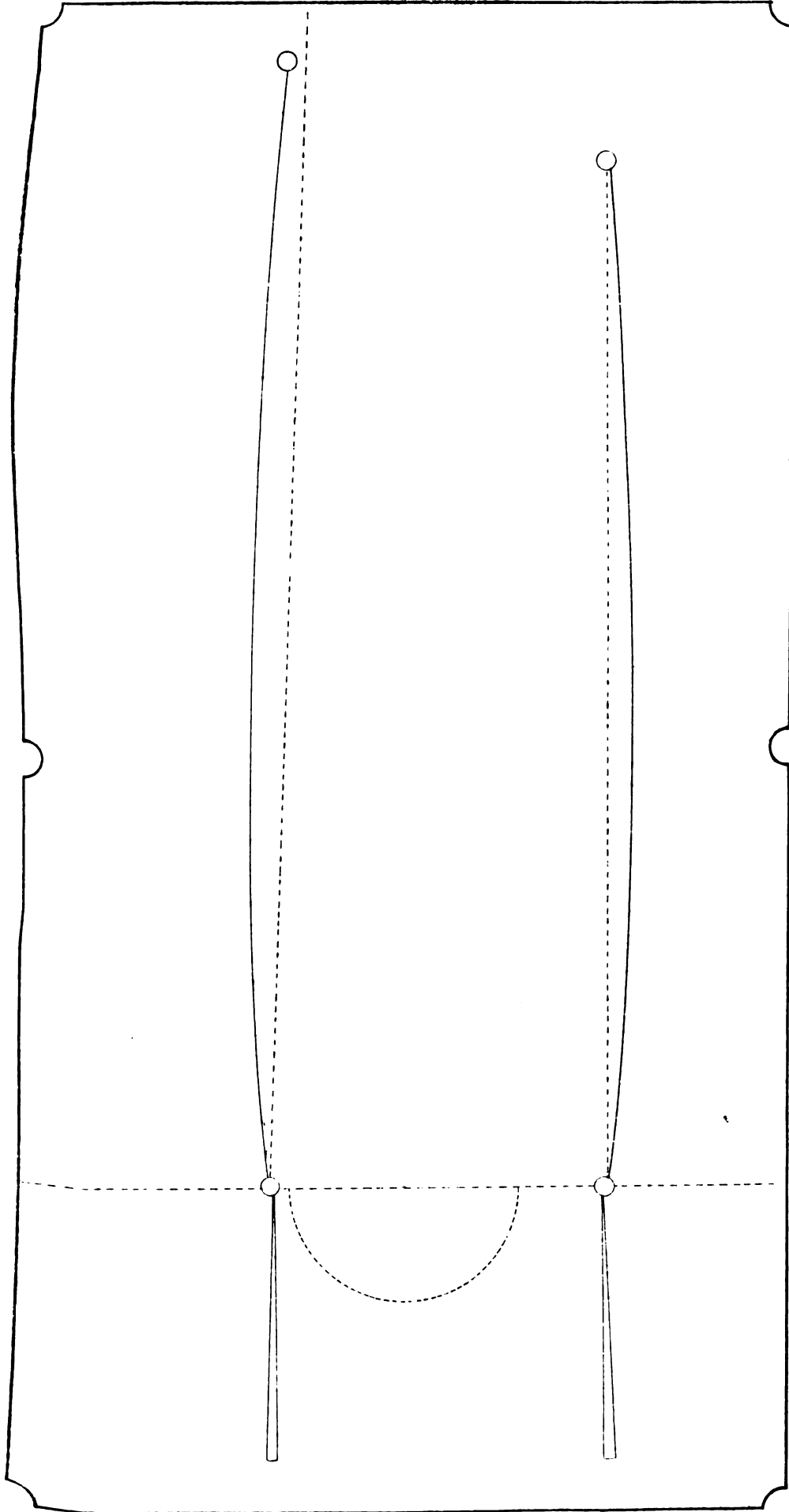


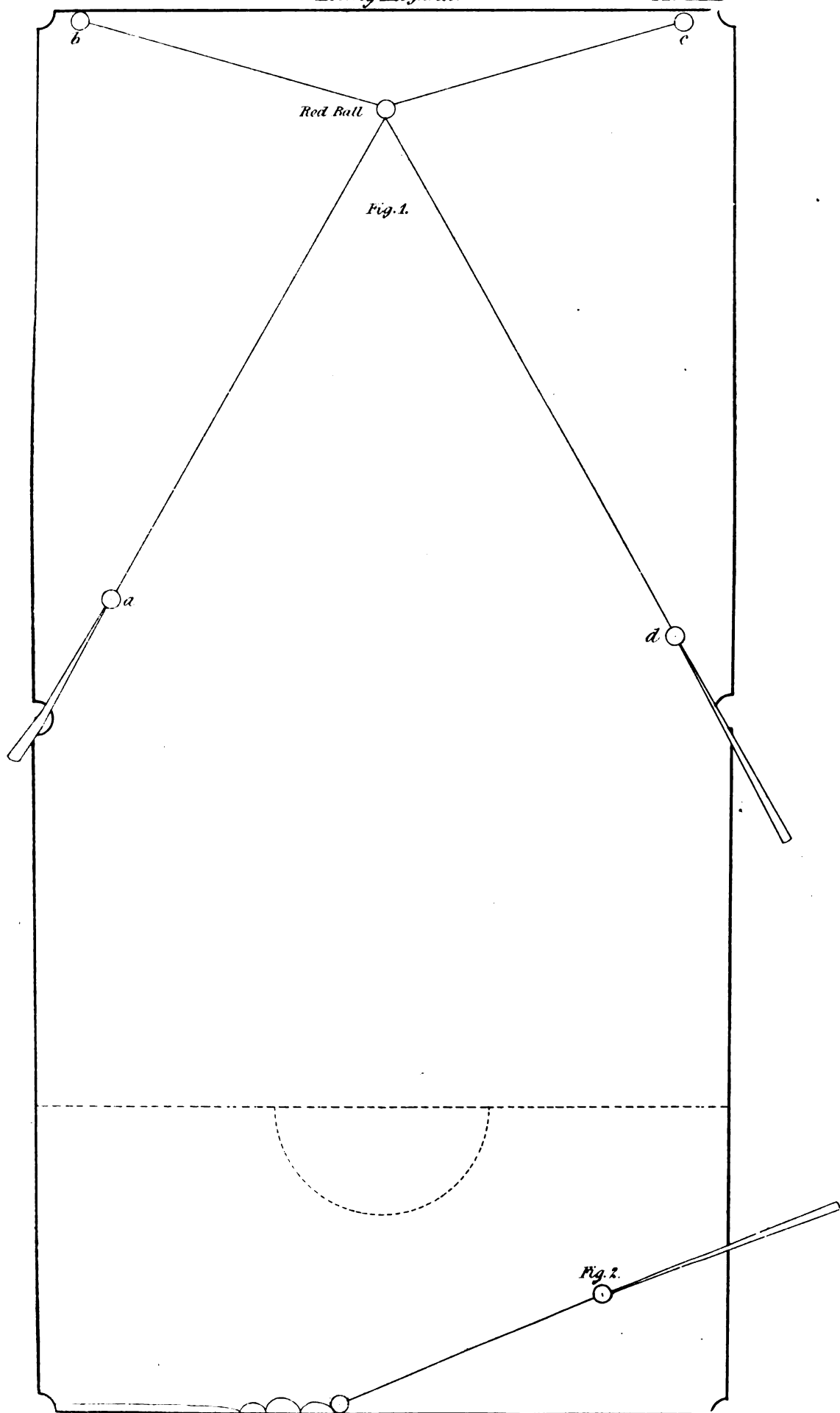


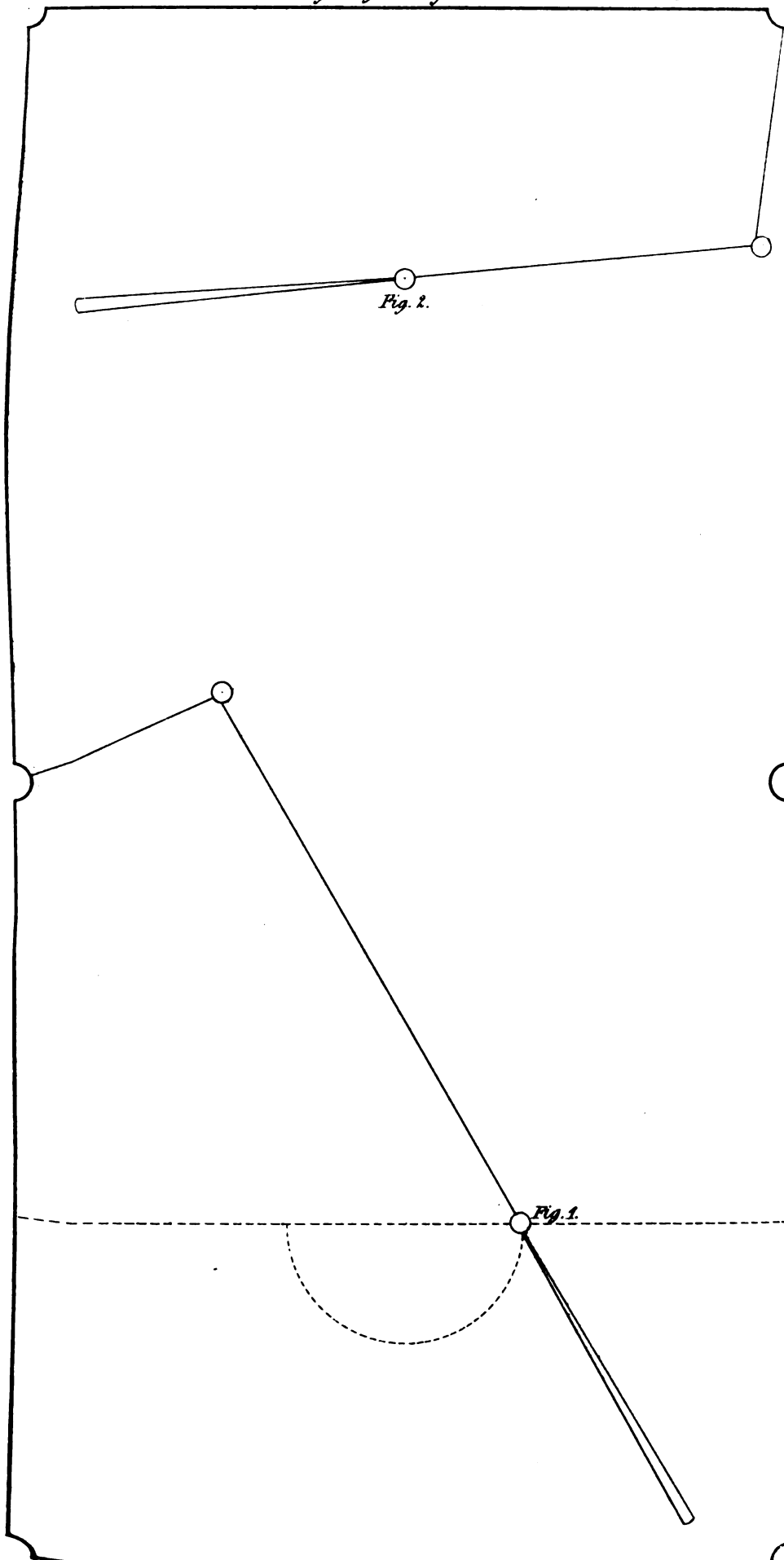
W. H. R. 1880, 1881, 1882

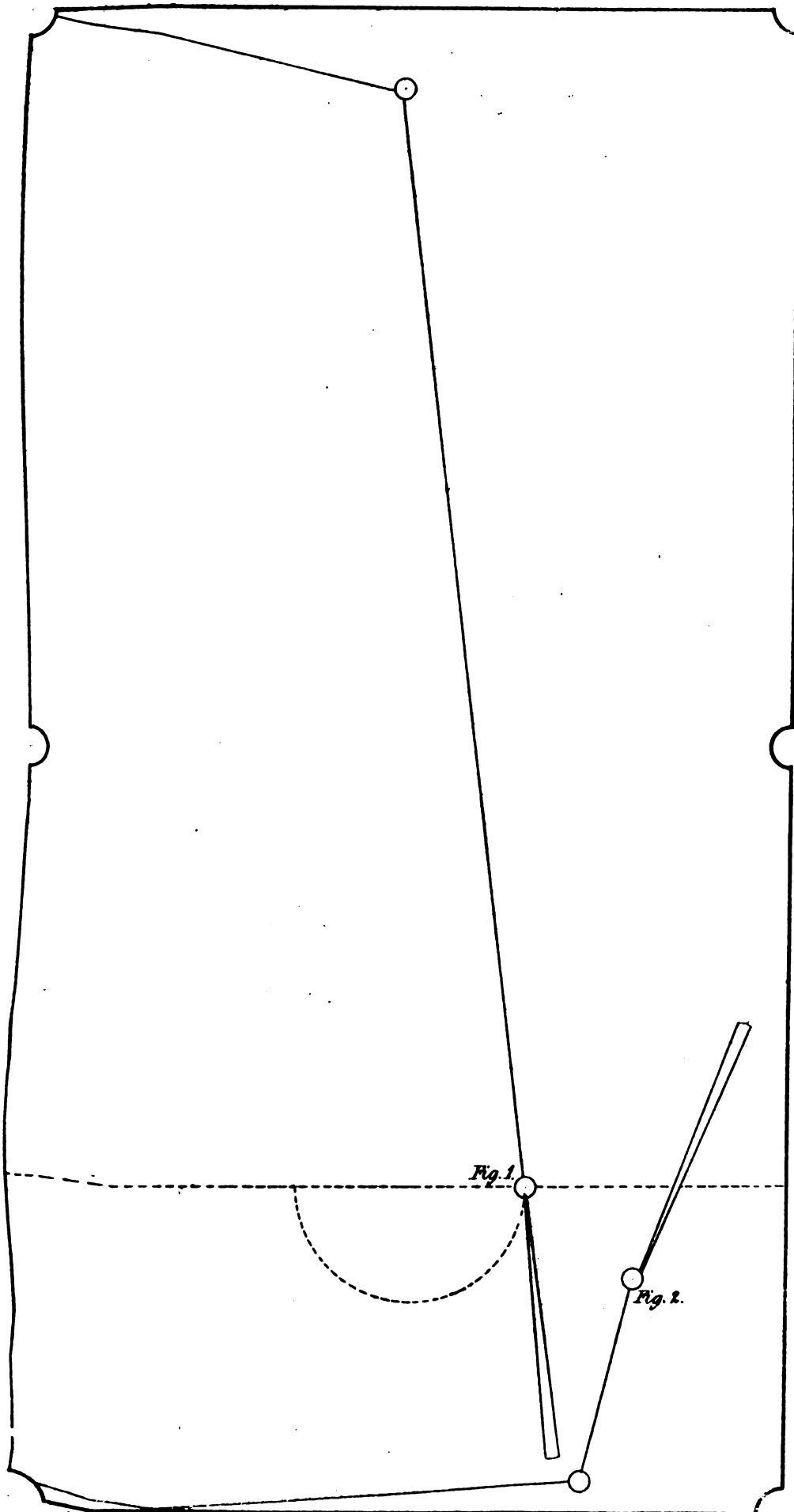






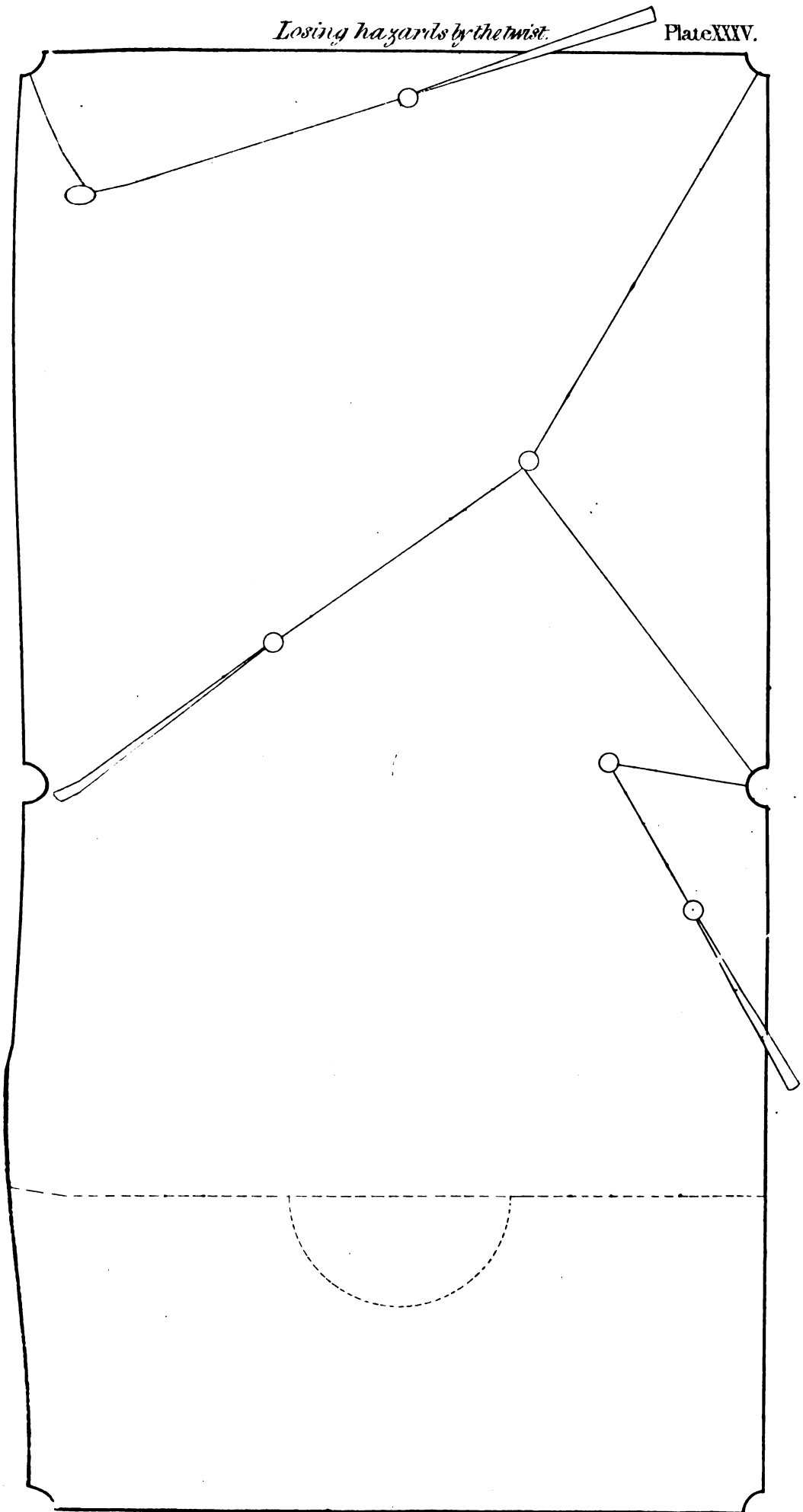


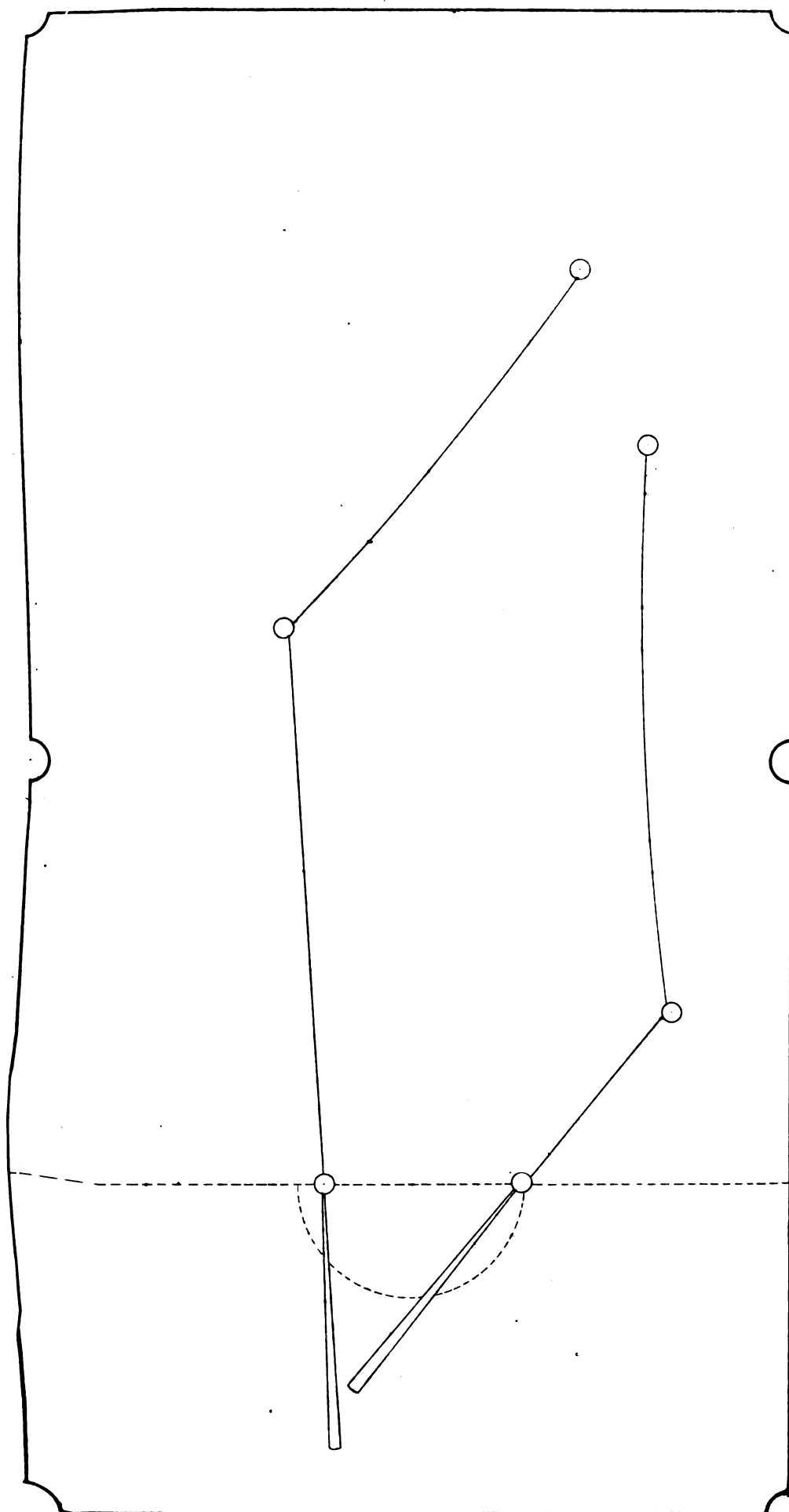


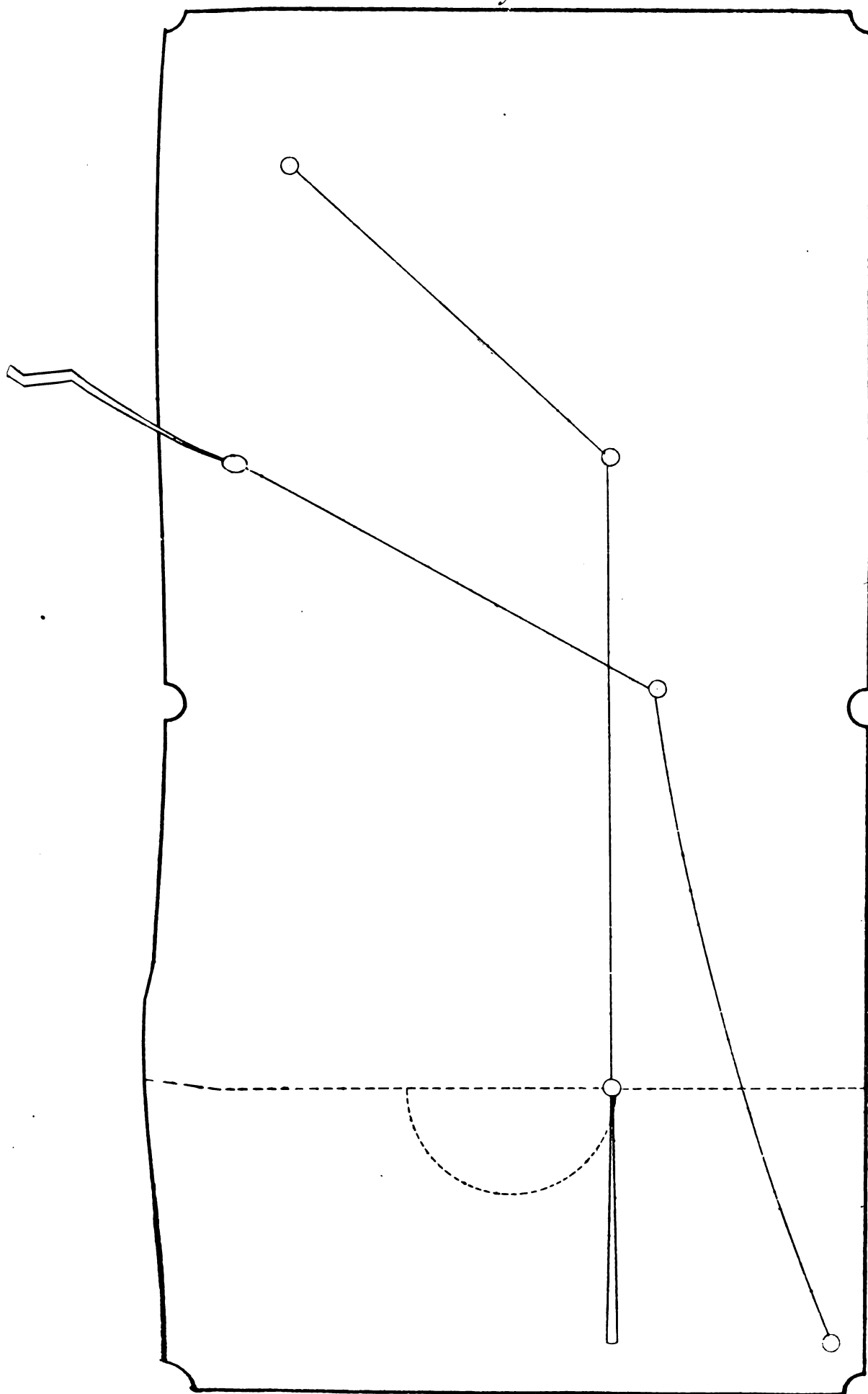


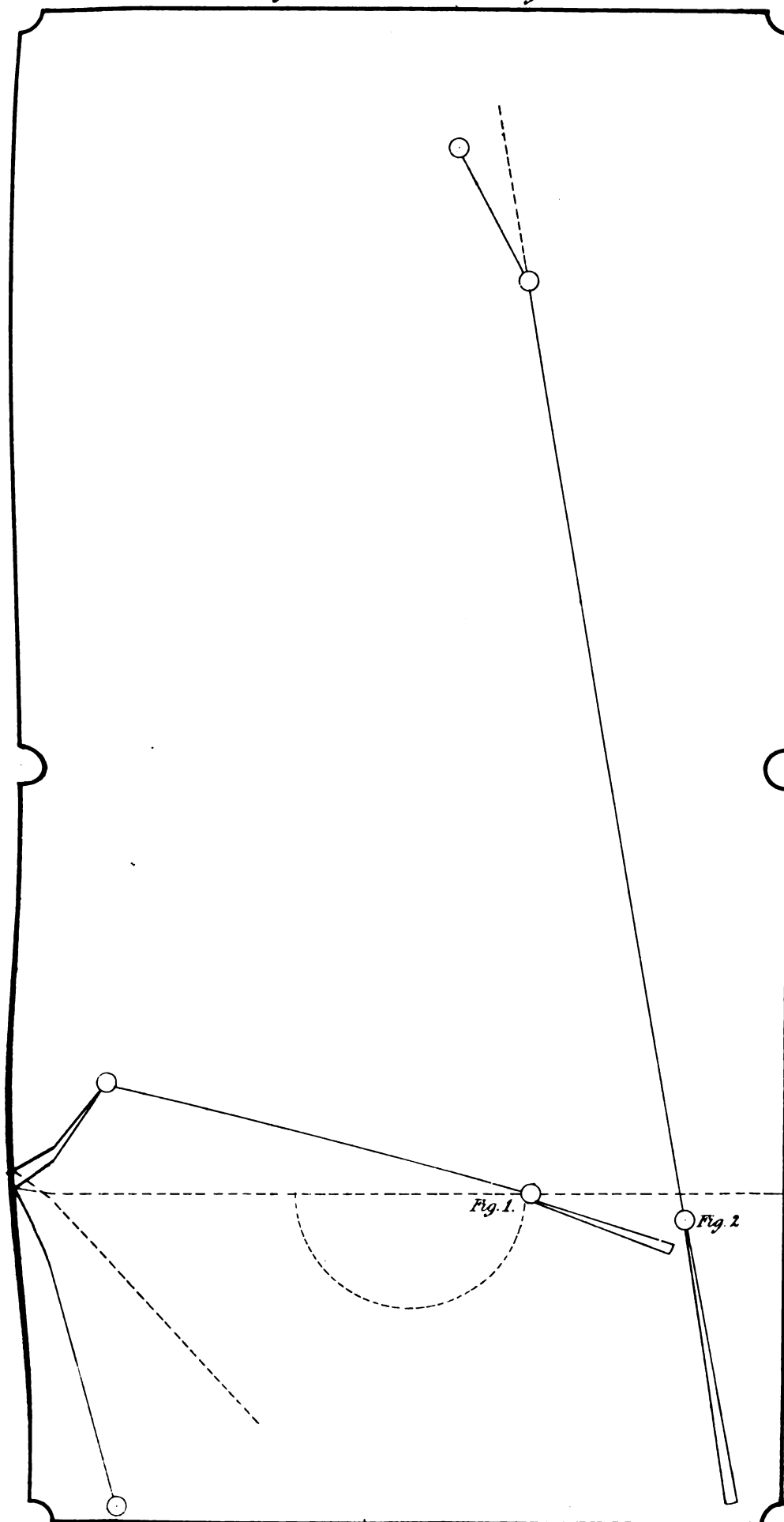
Losing hazards by the twist.

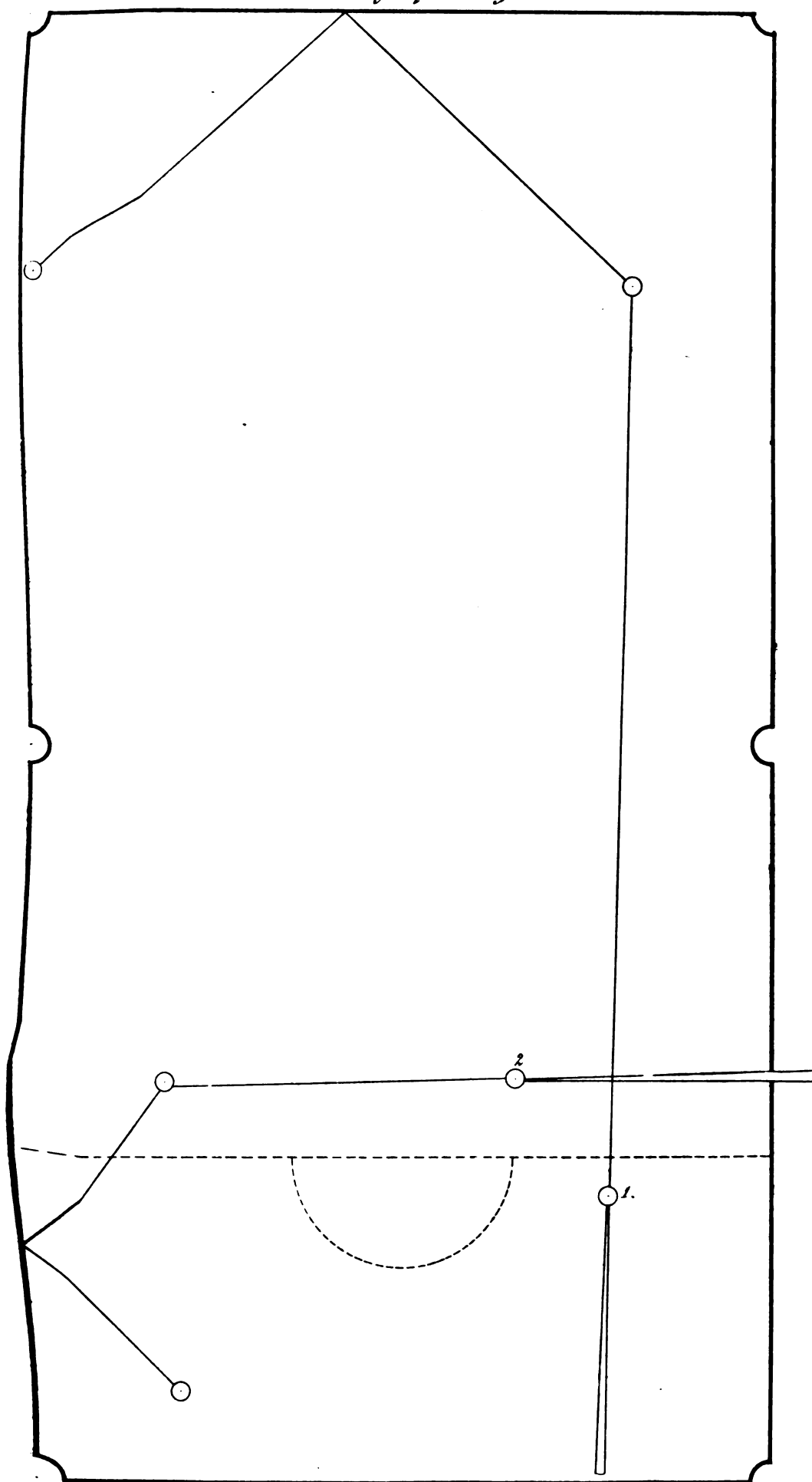
Plate XXXIV.

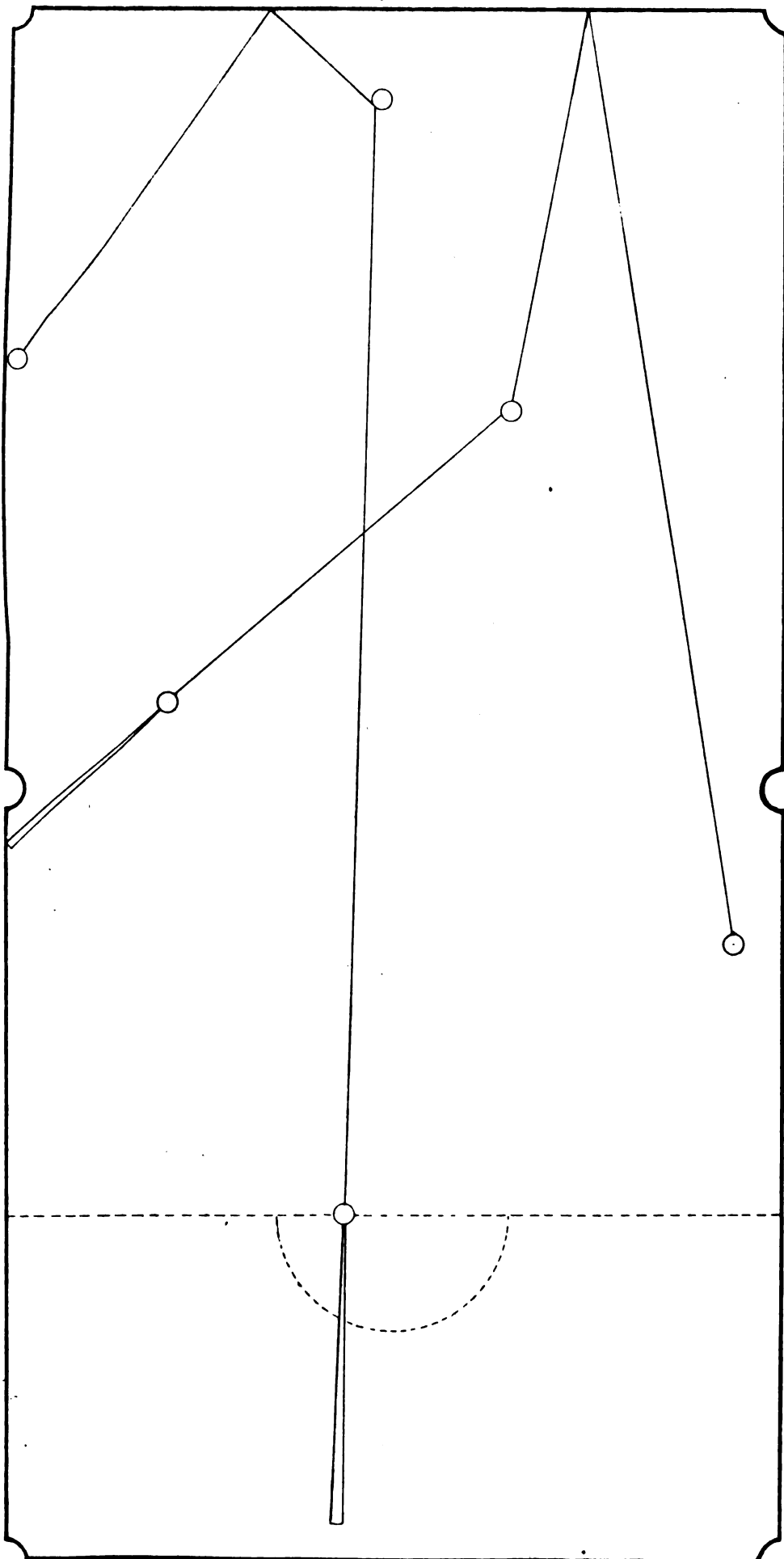


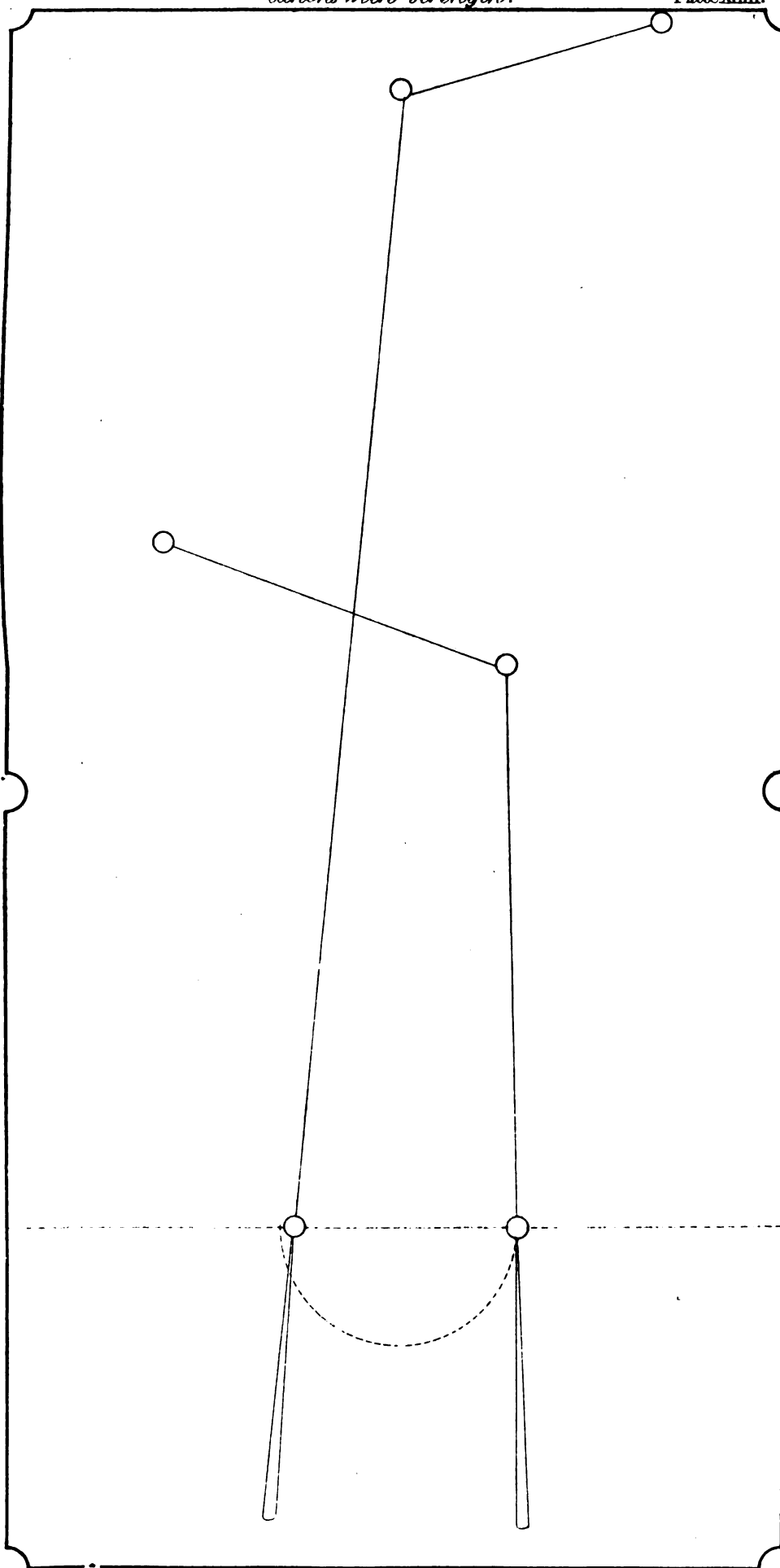


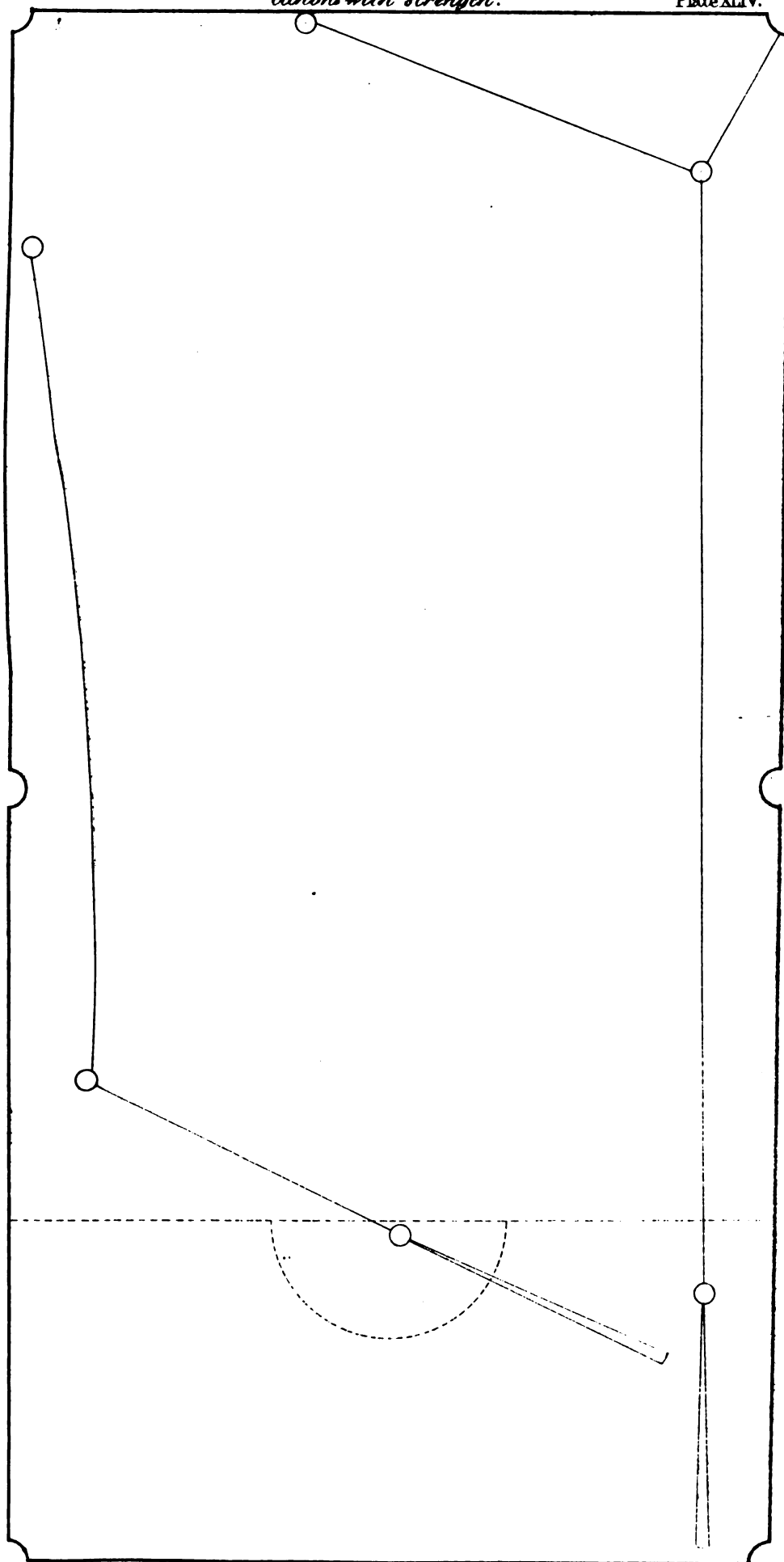


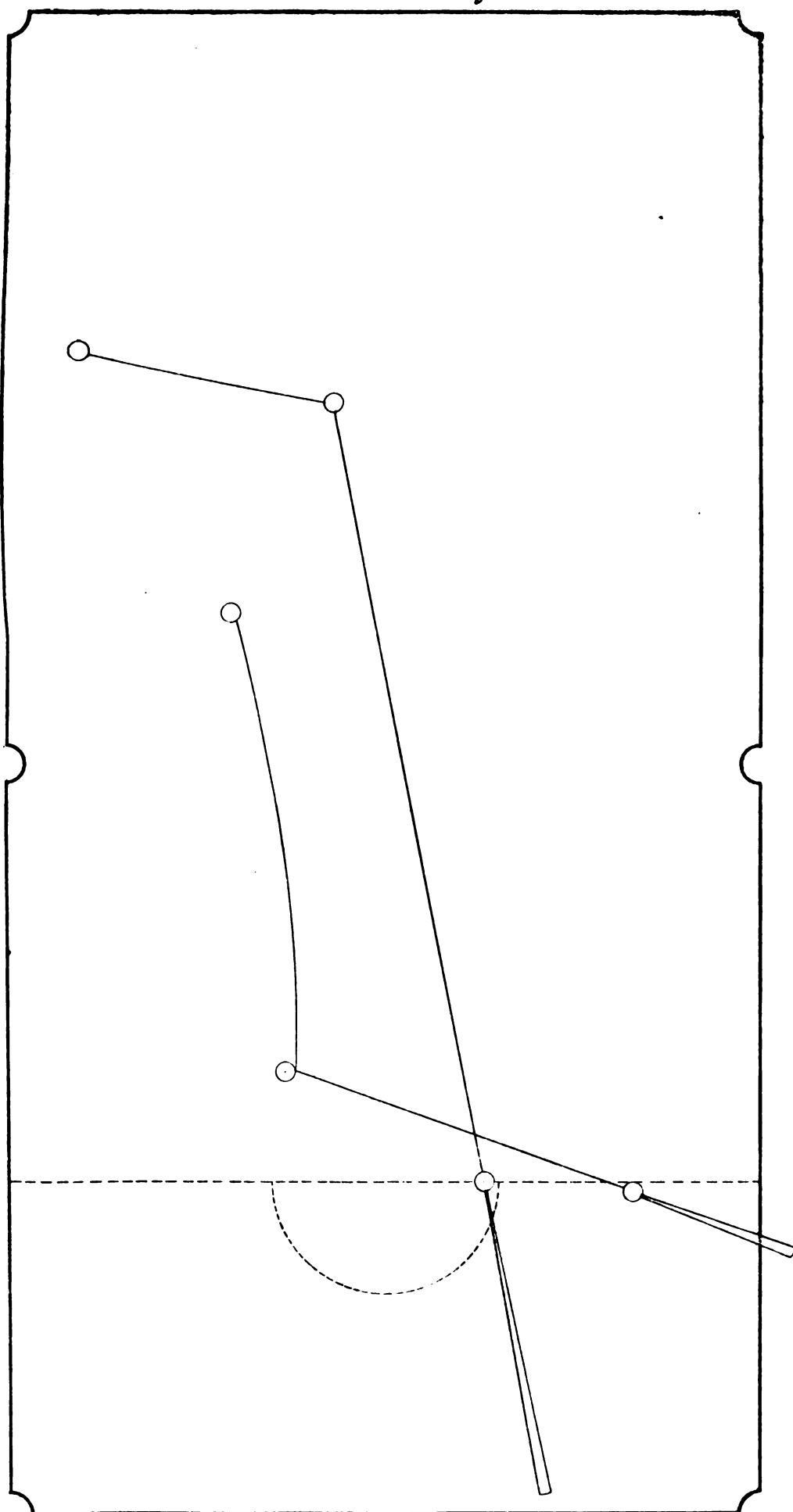


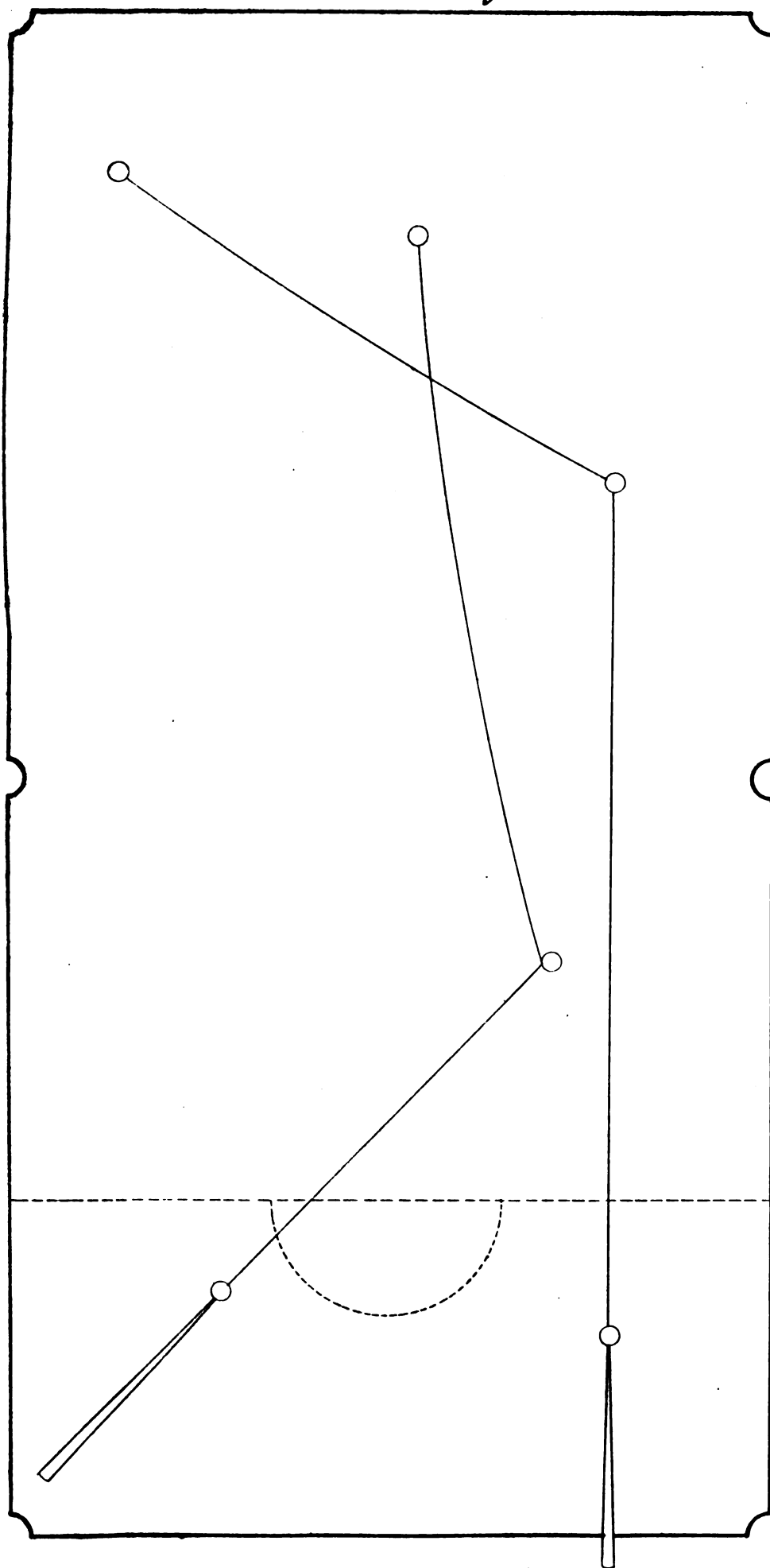


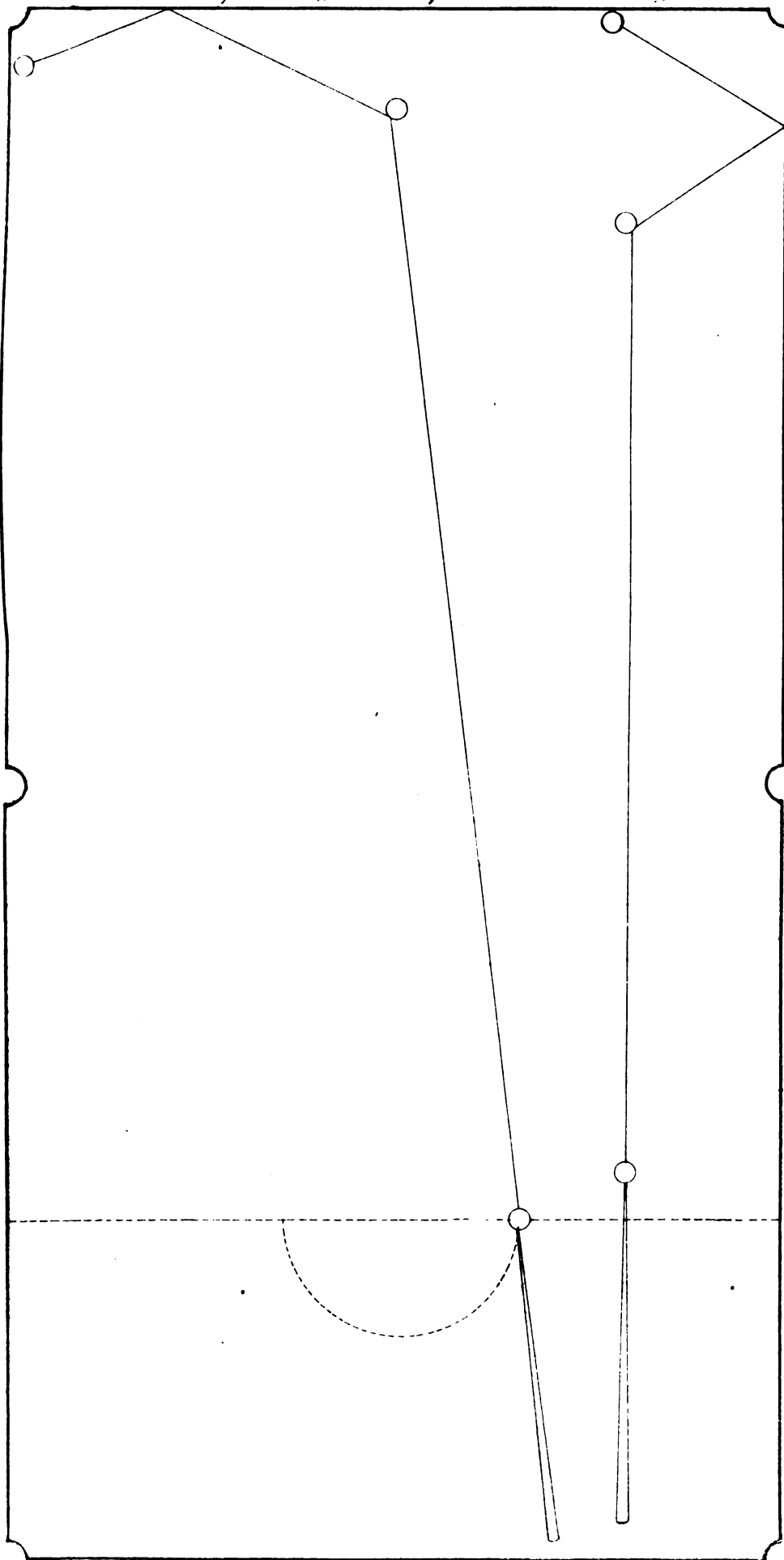




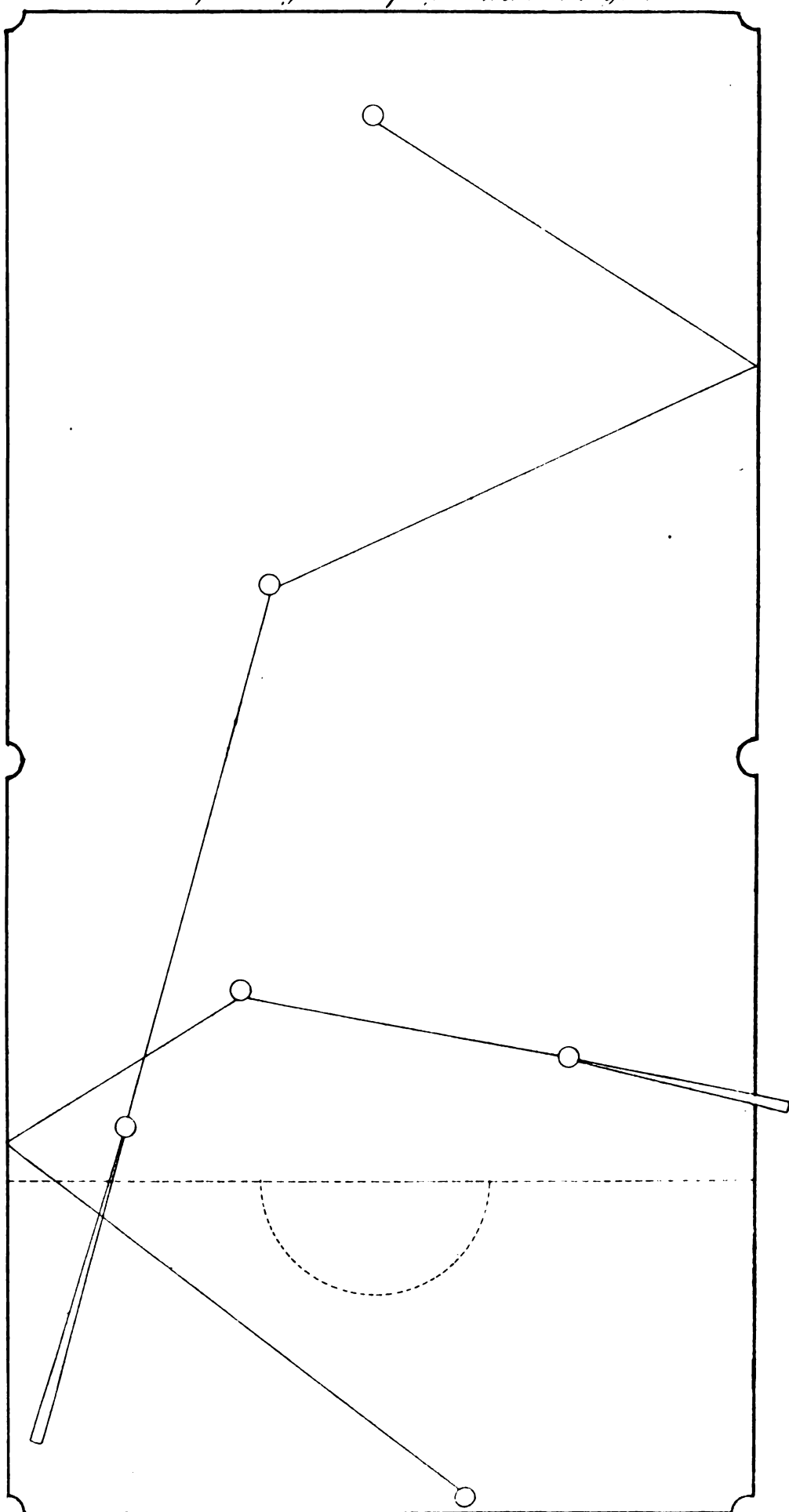


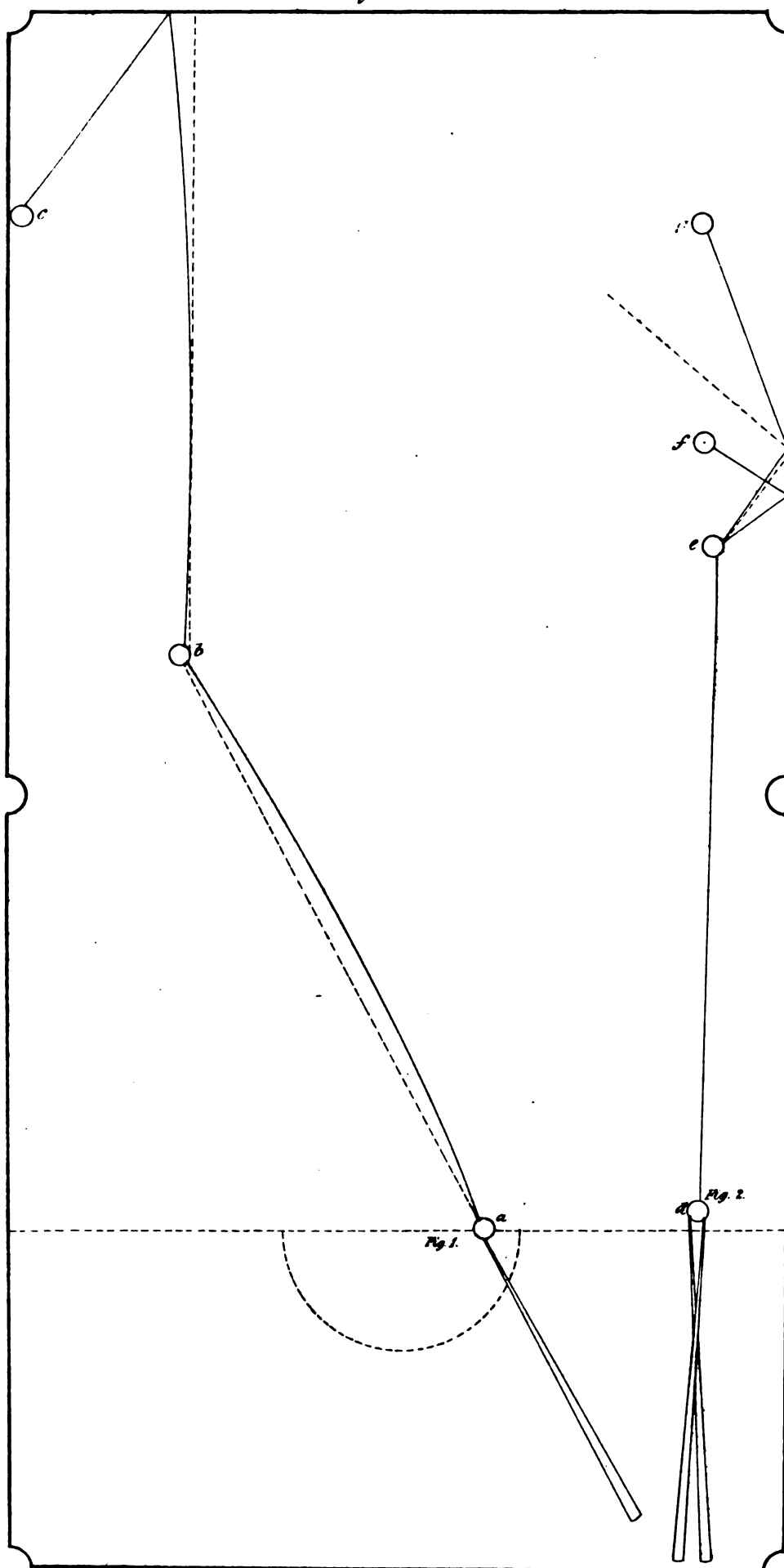


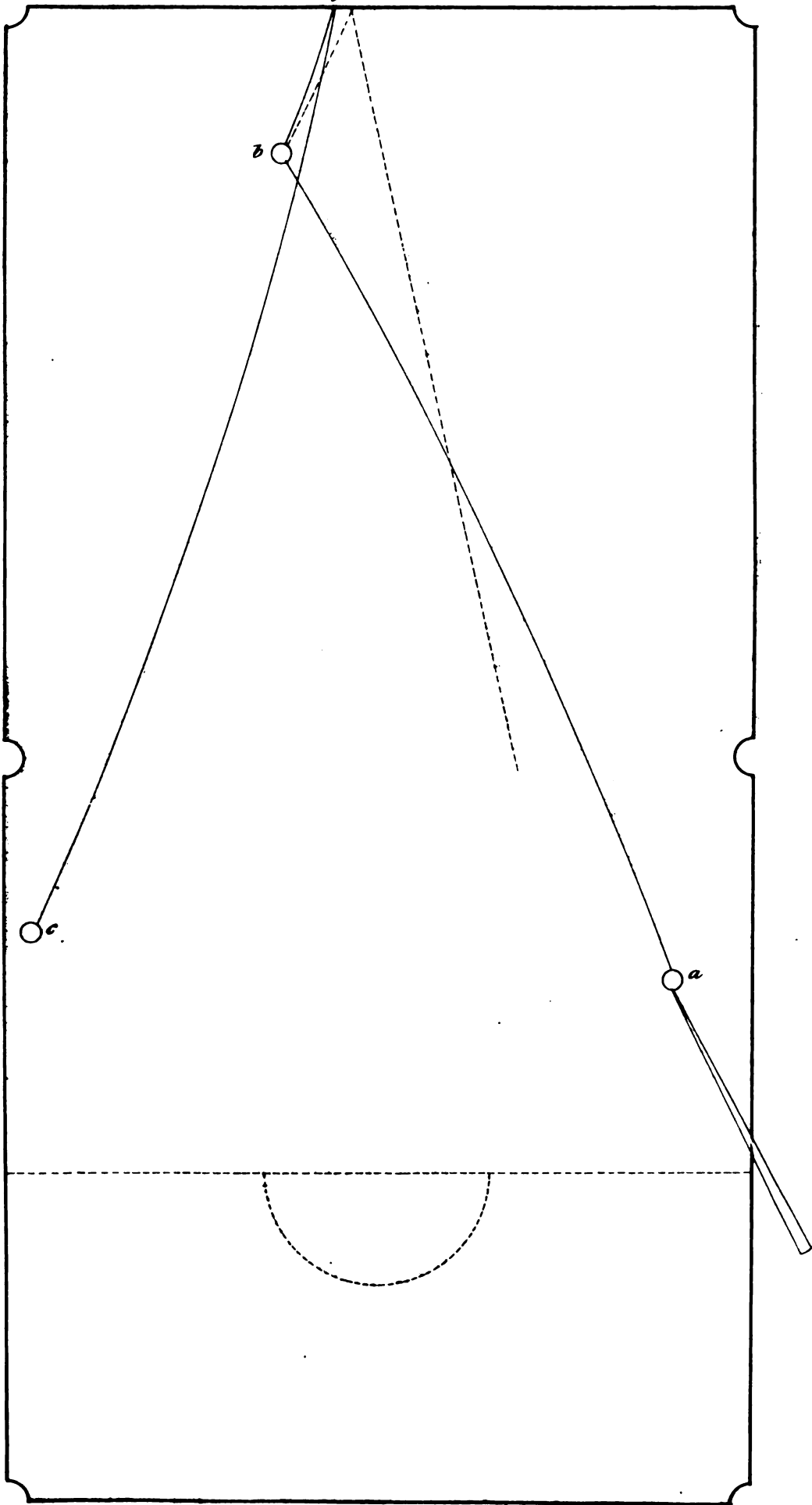


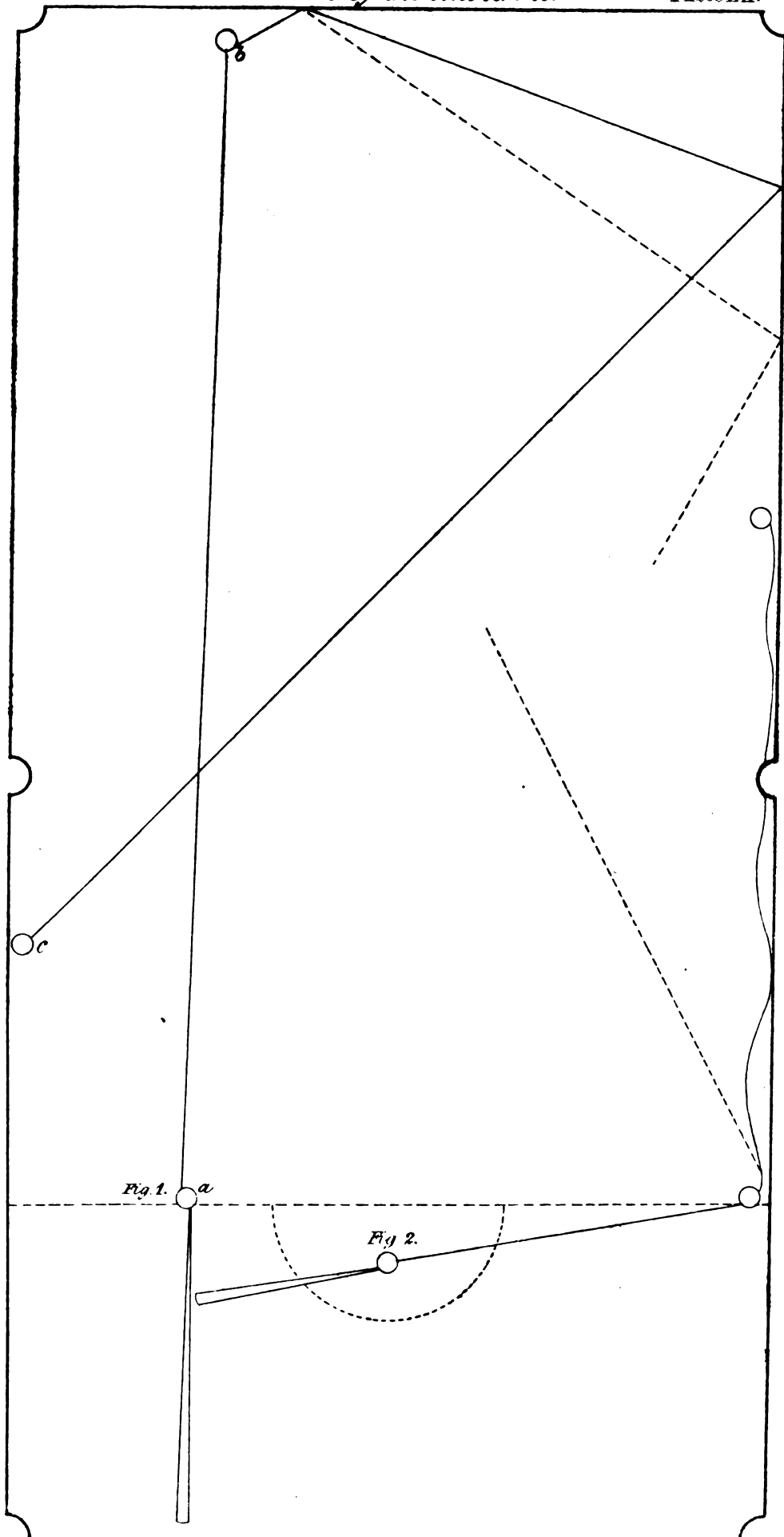


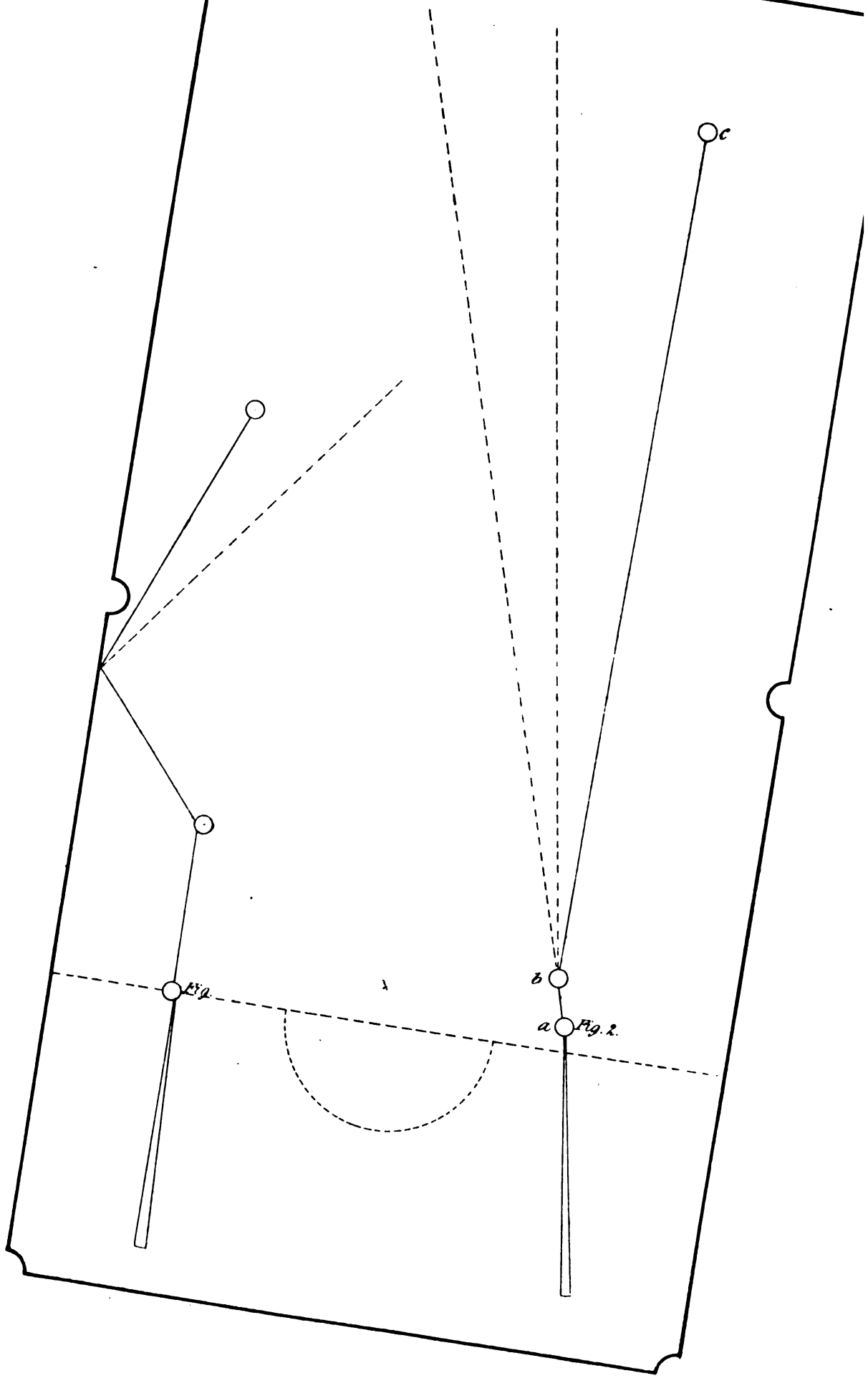
Canons of equal angles to be played with strength. Plate XLVIII

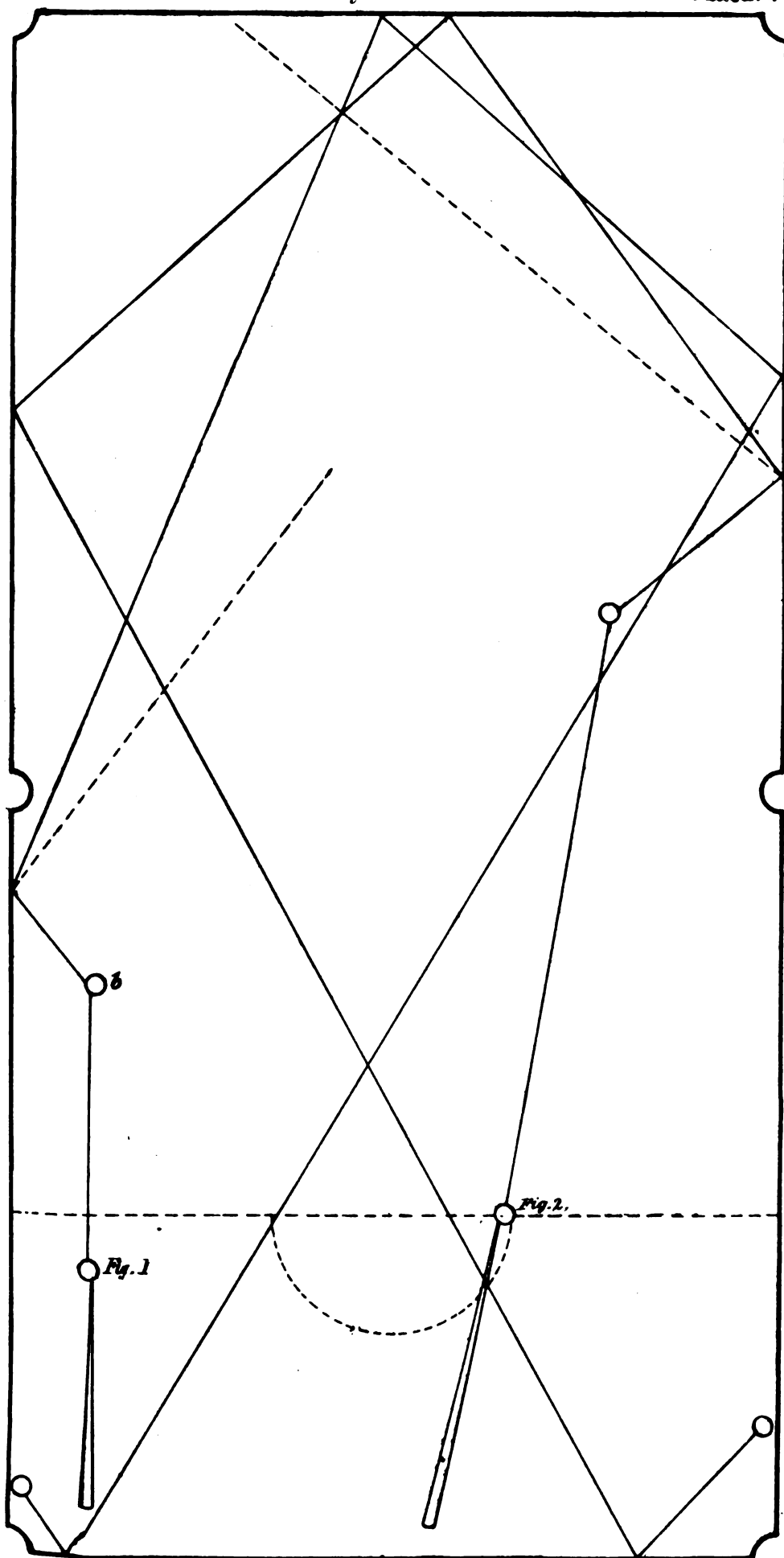


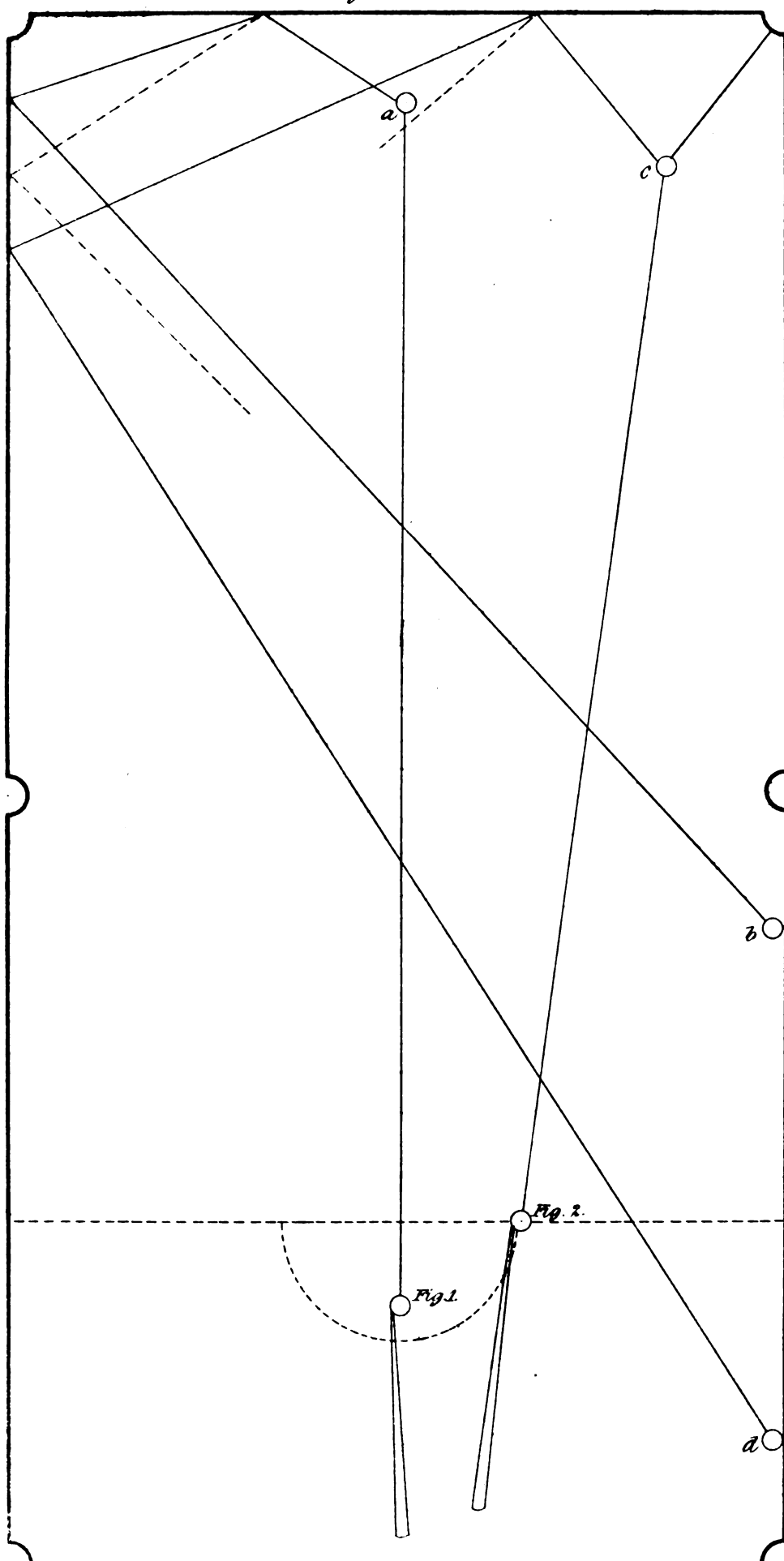


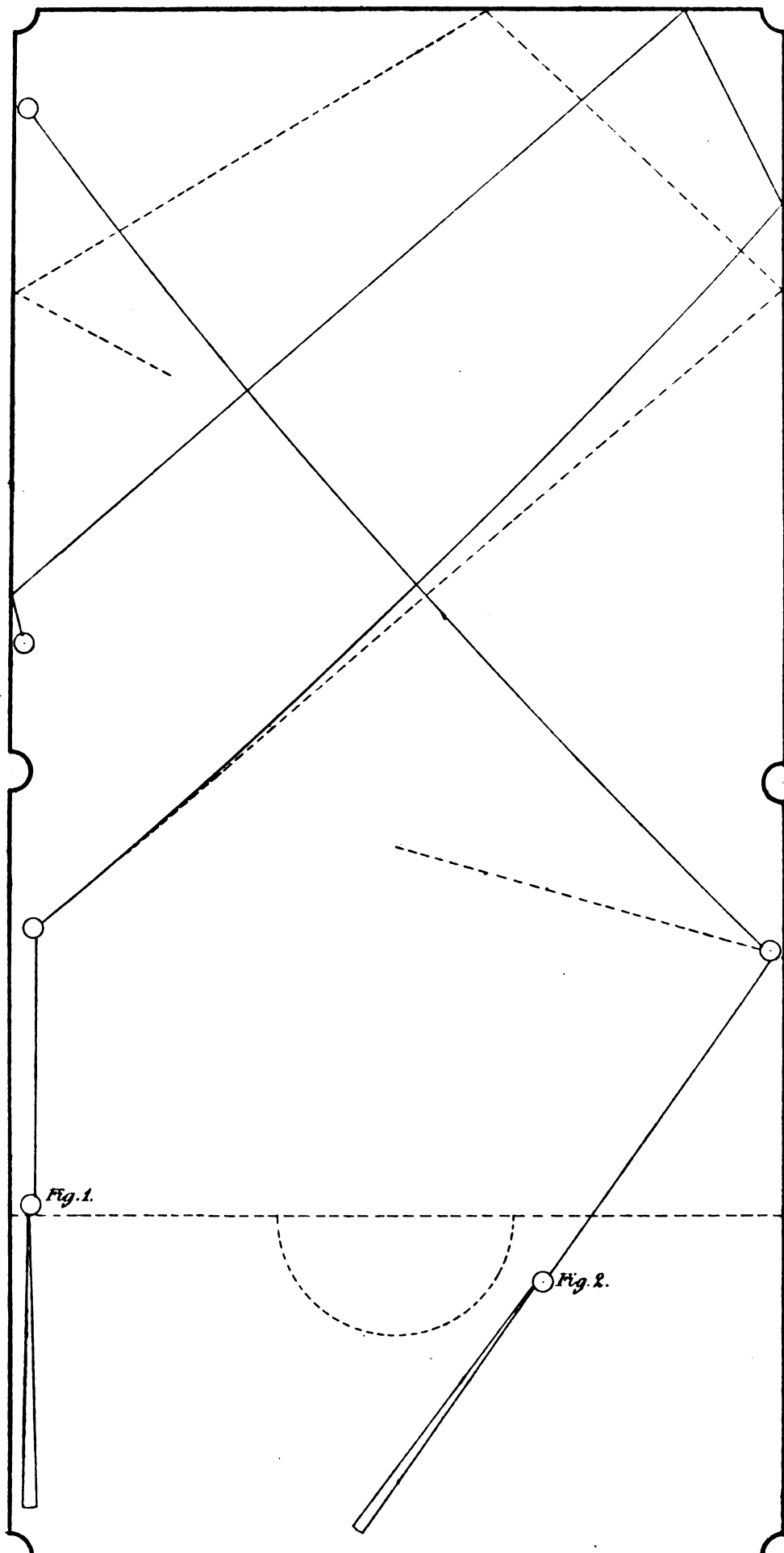


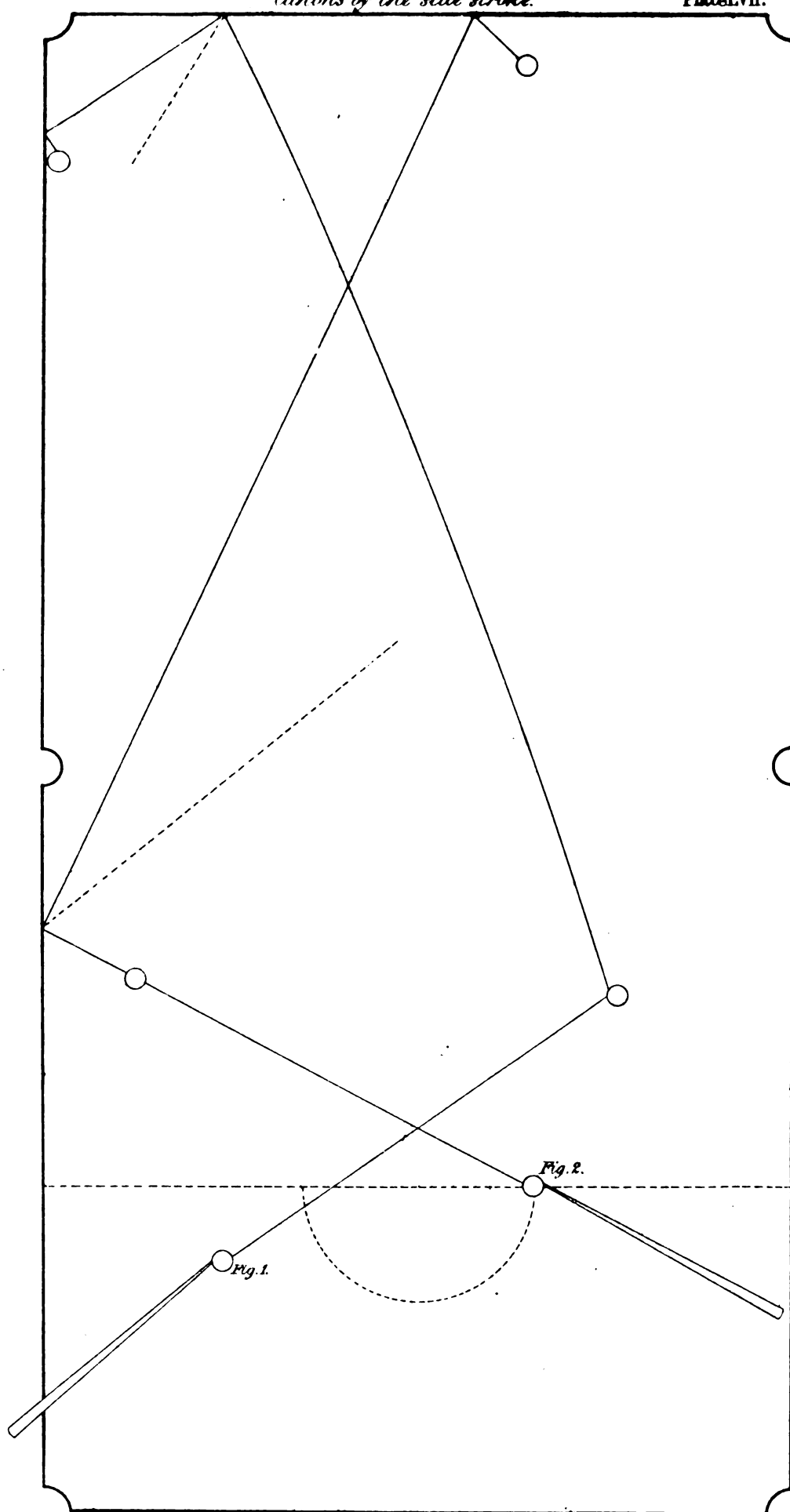


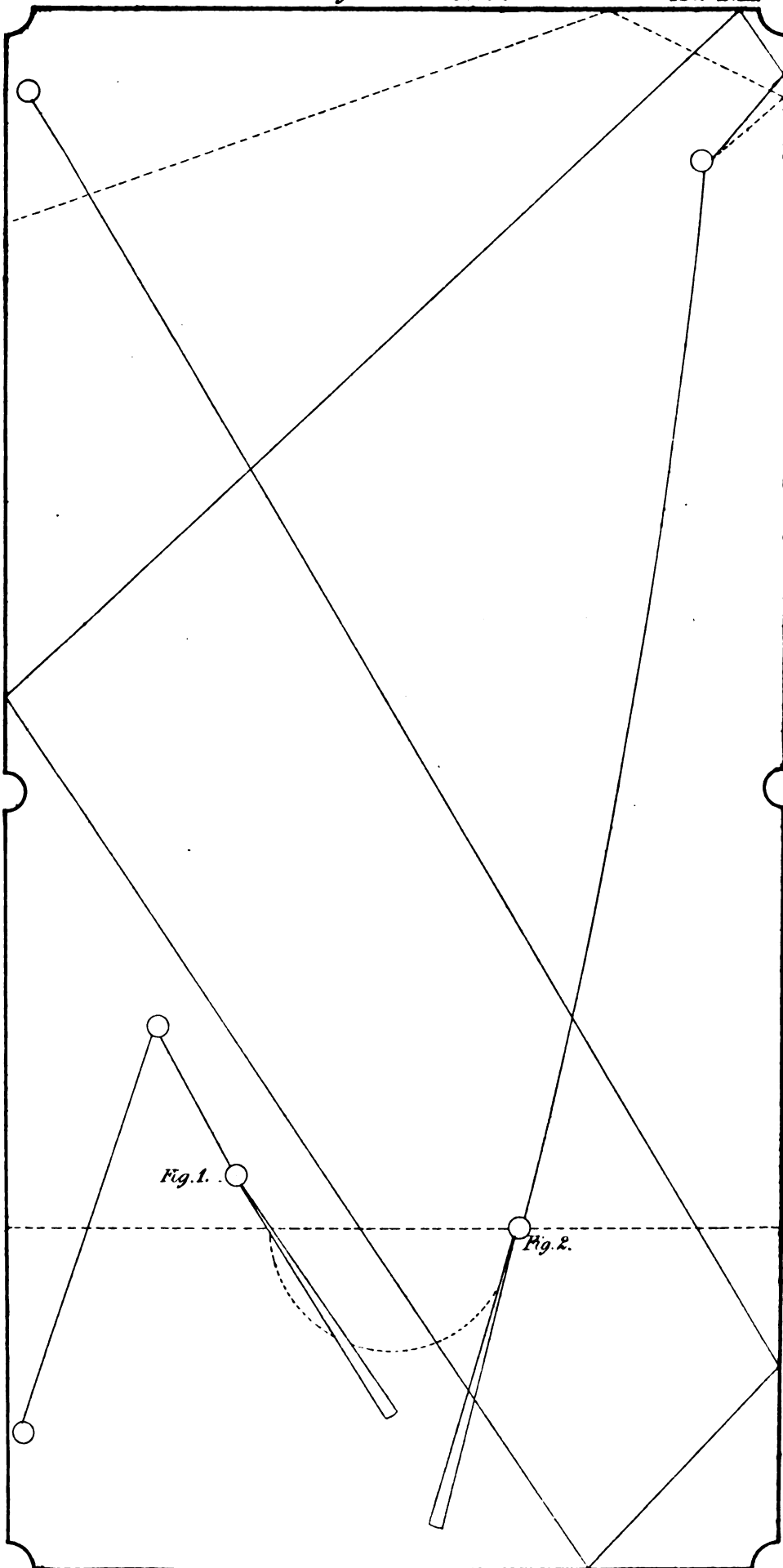


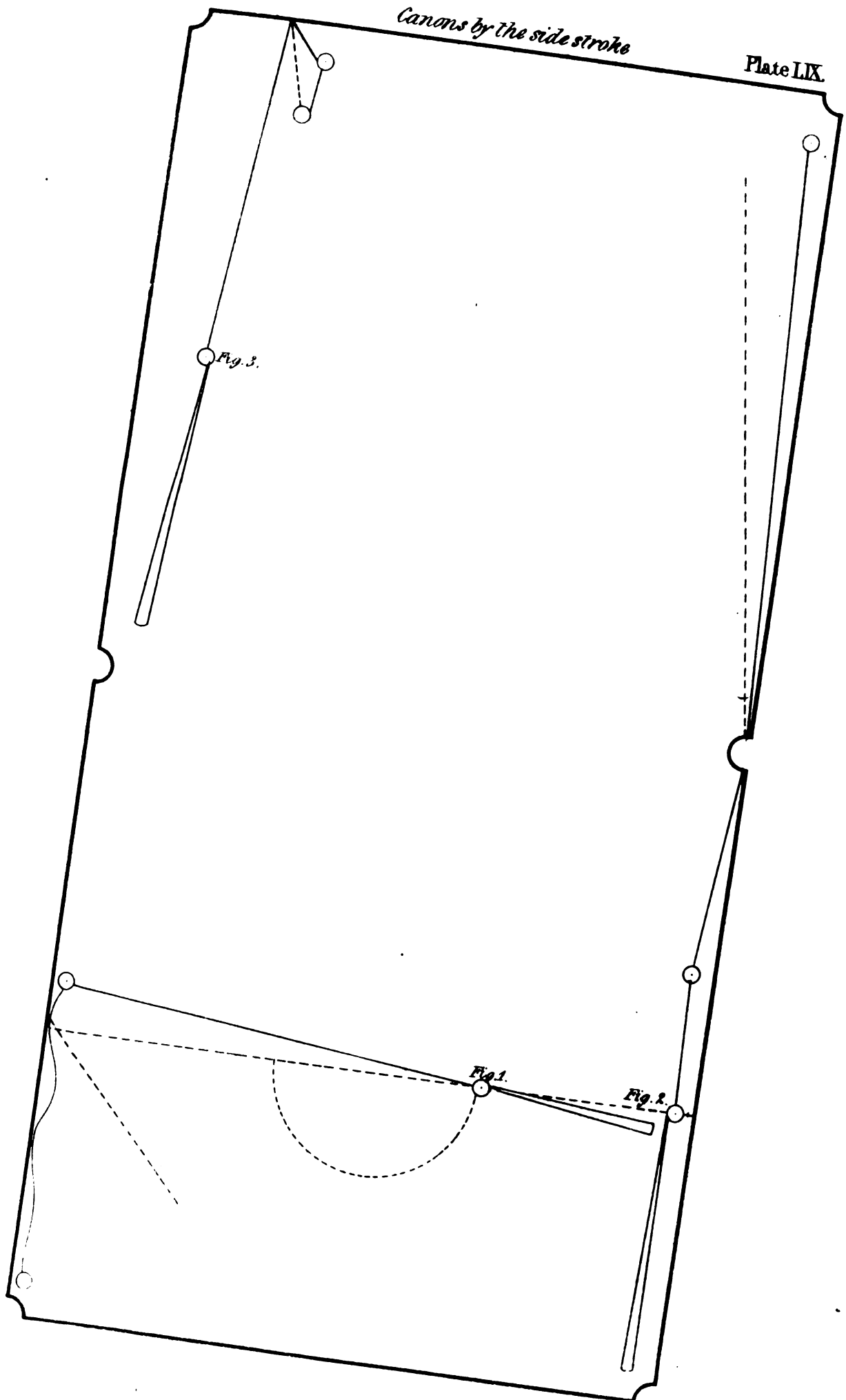










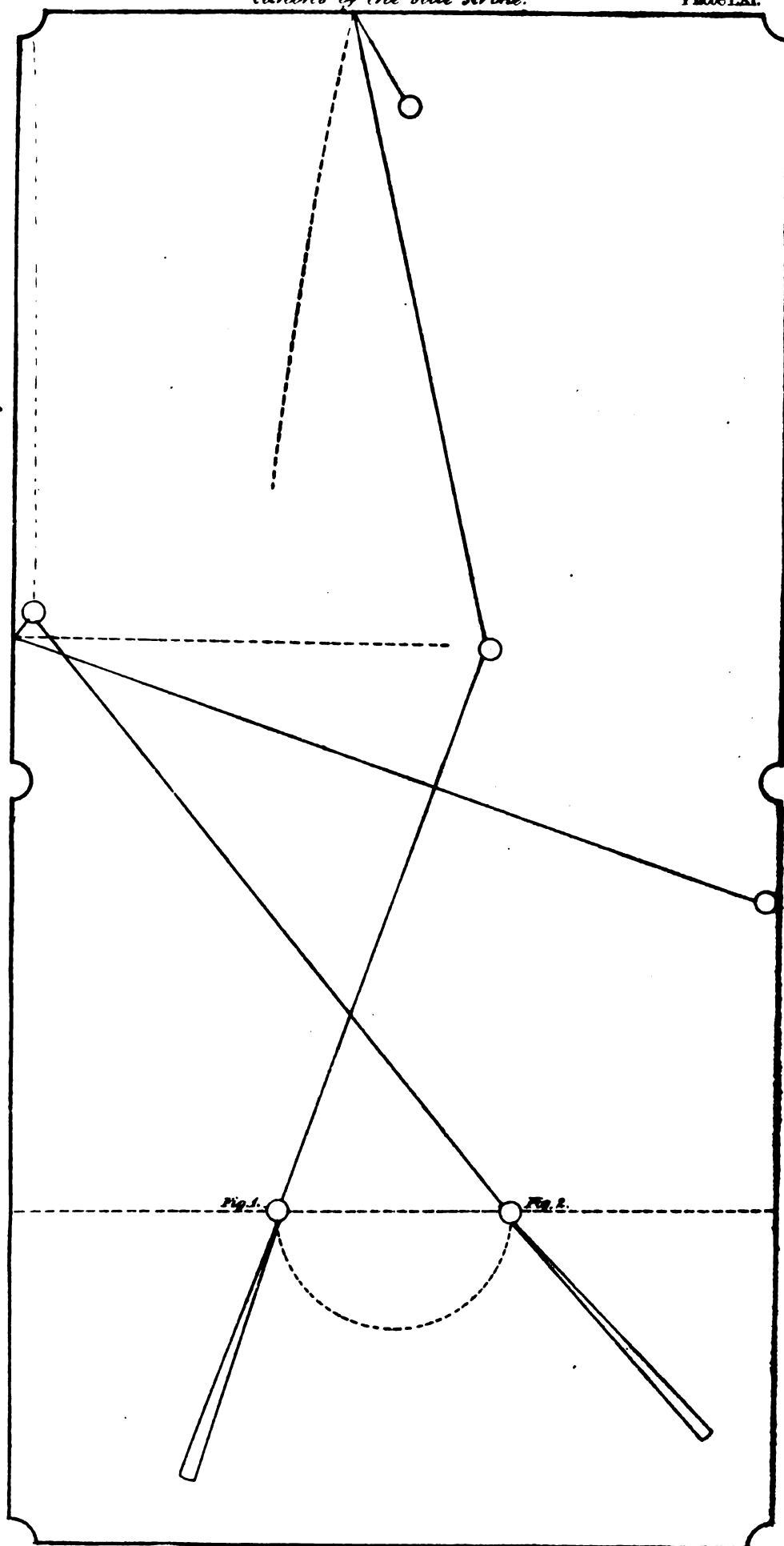


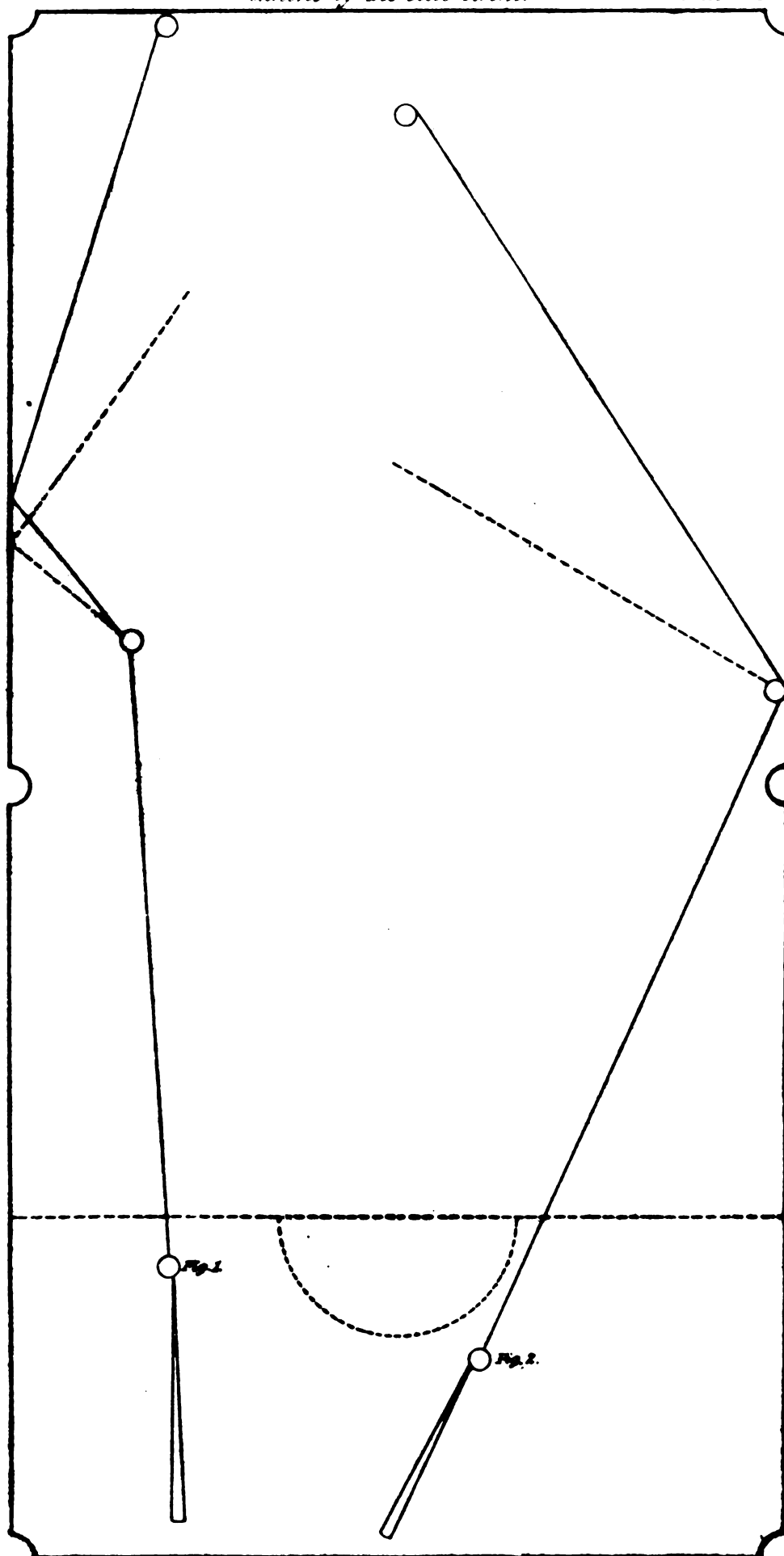
Canons by the side stroke.

Plate LX.

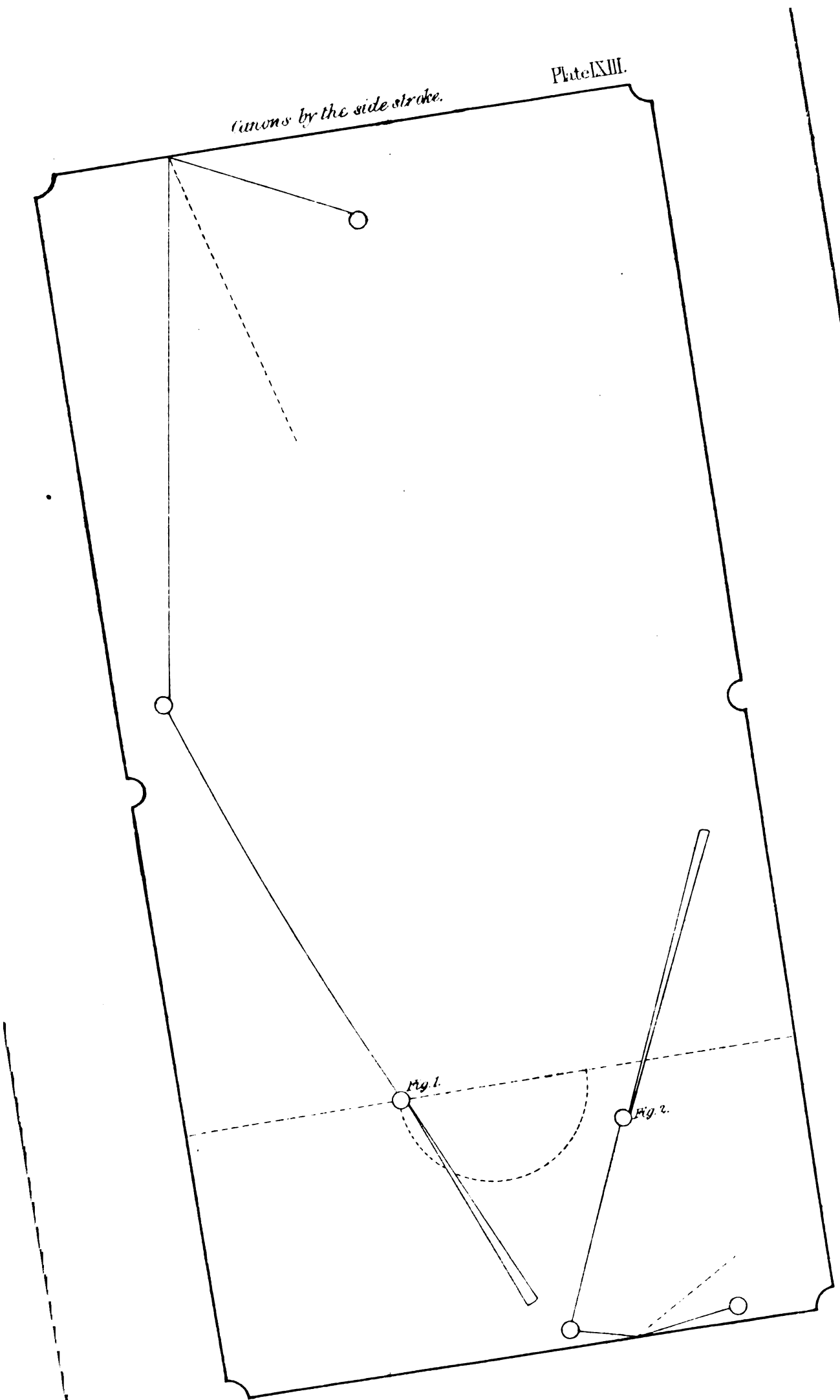
Fig. 2.

Fig. 1.





Canons by the side stroke.



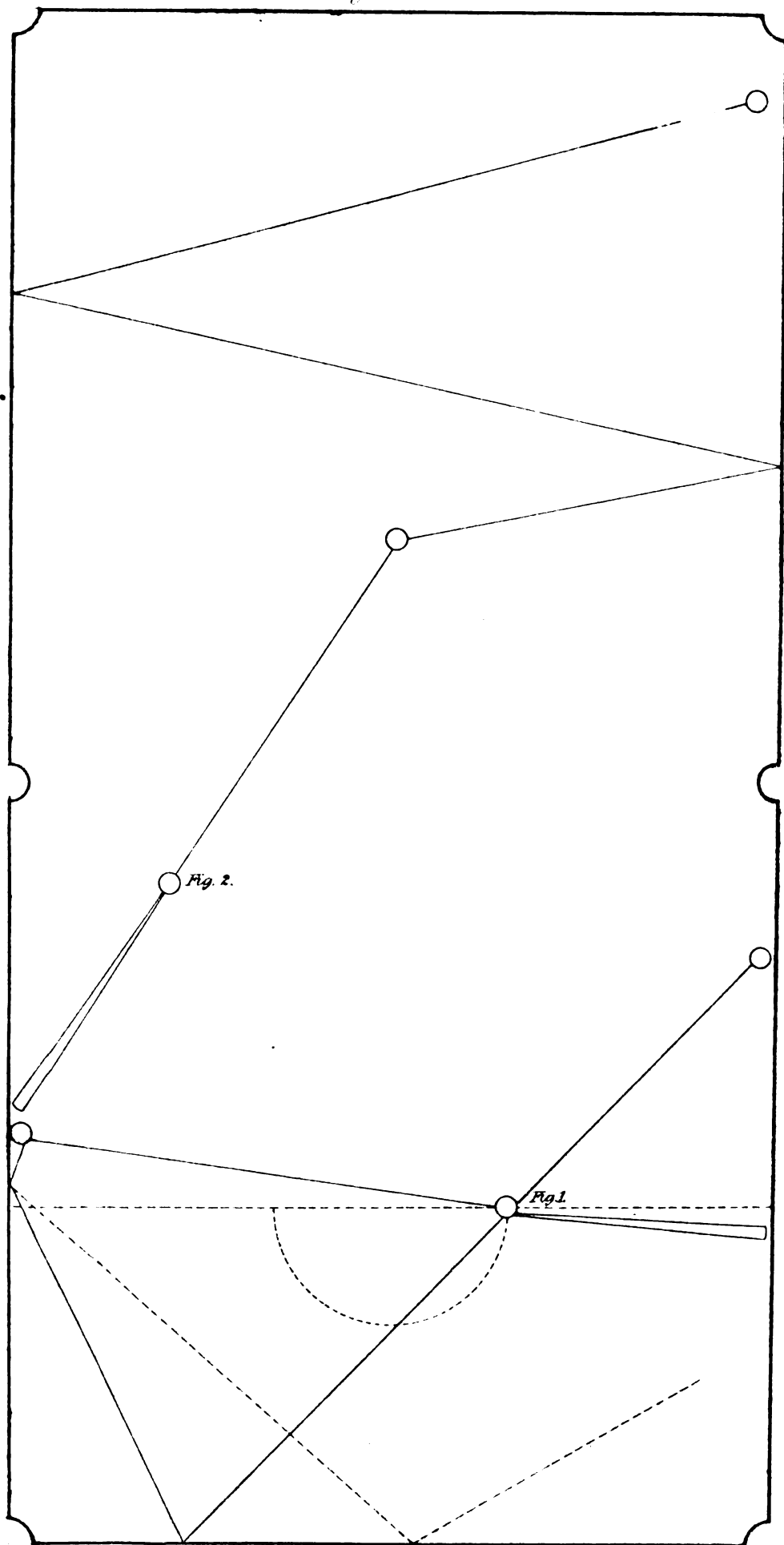


Fig. 2.

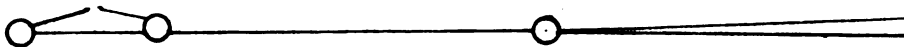
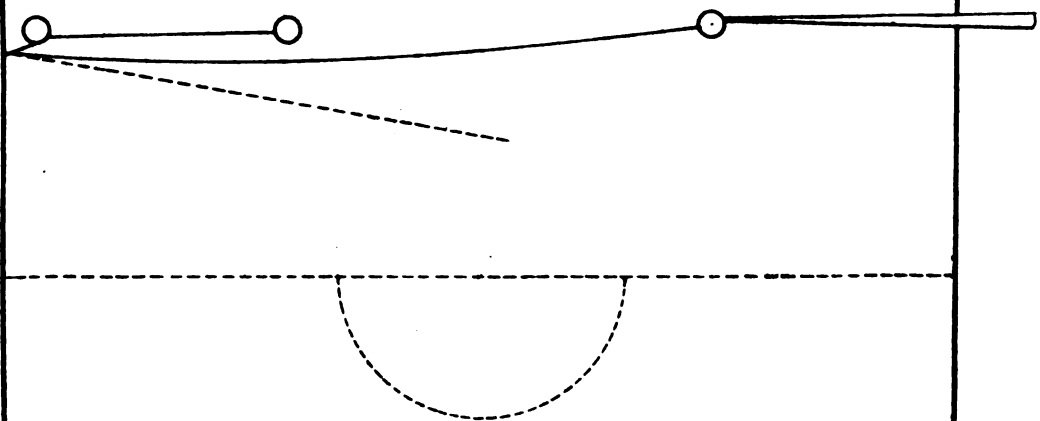
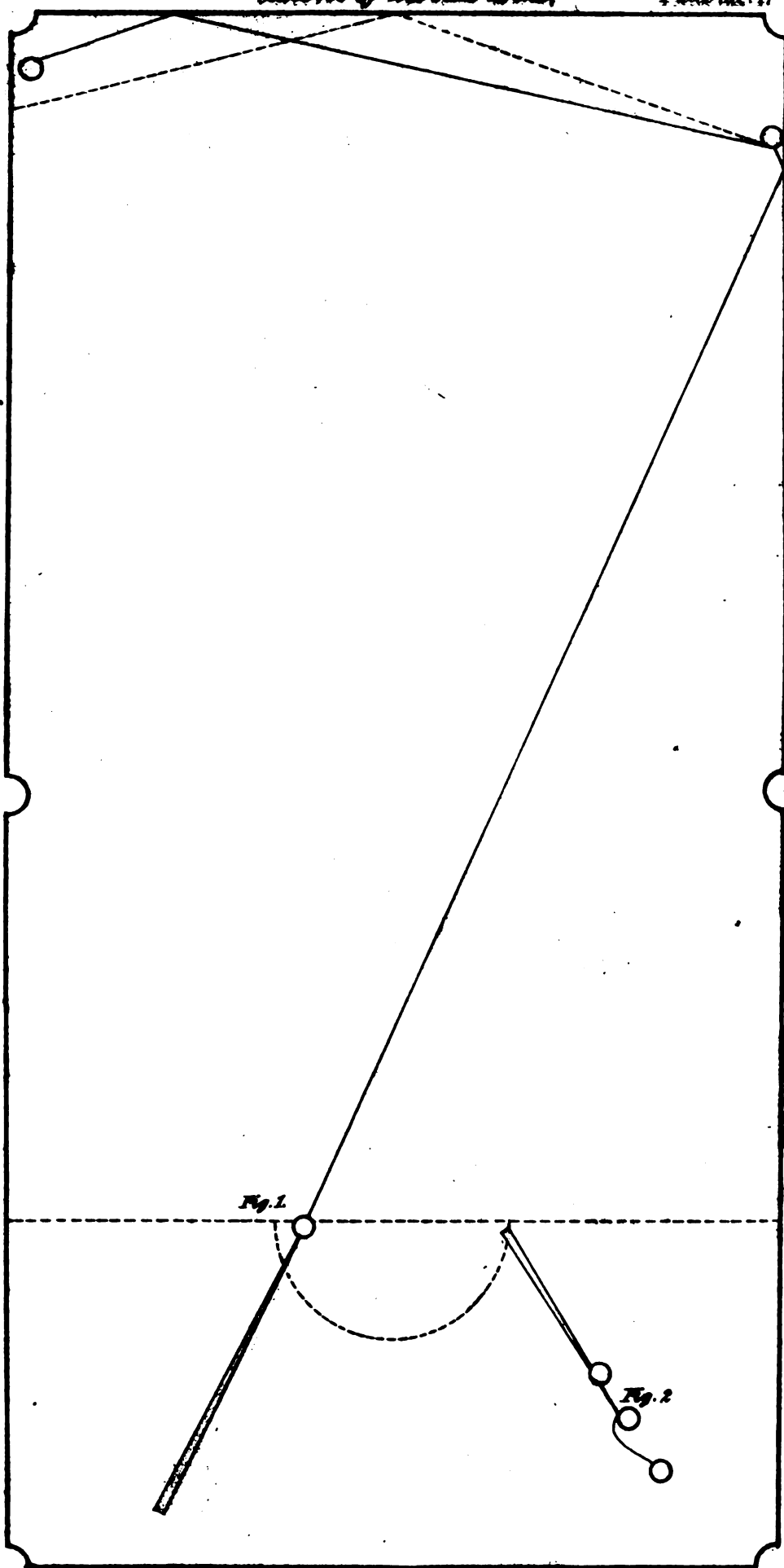
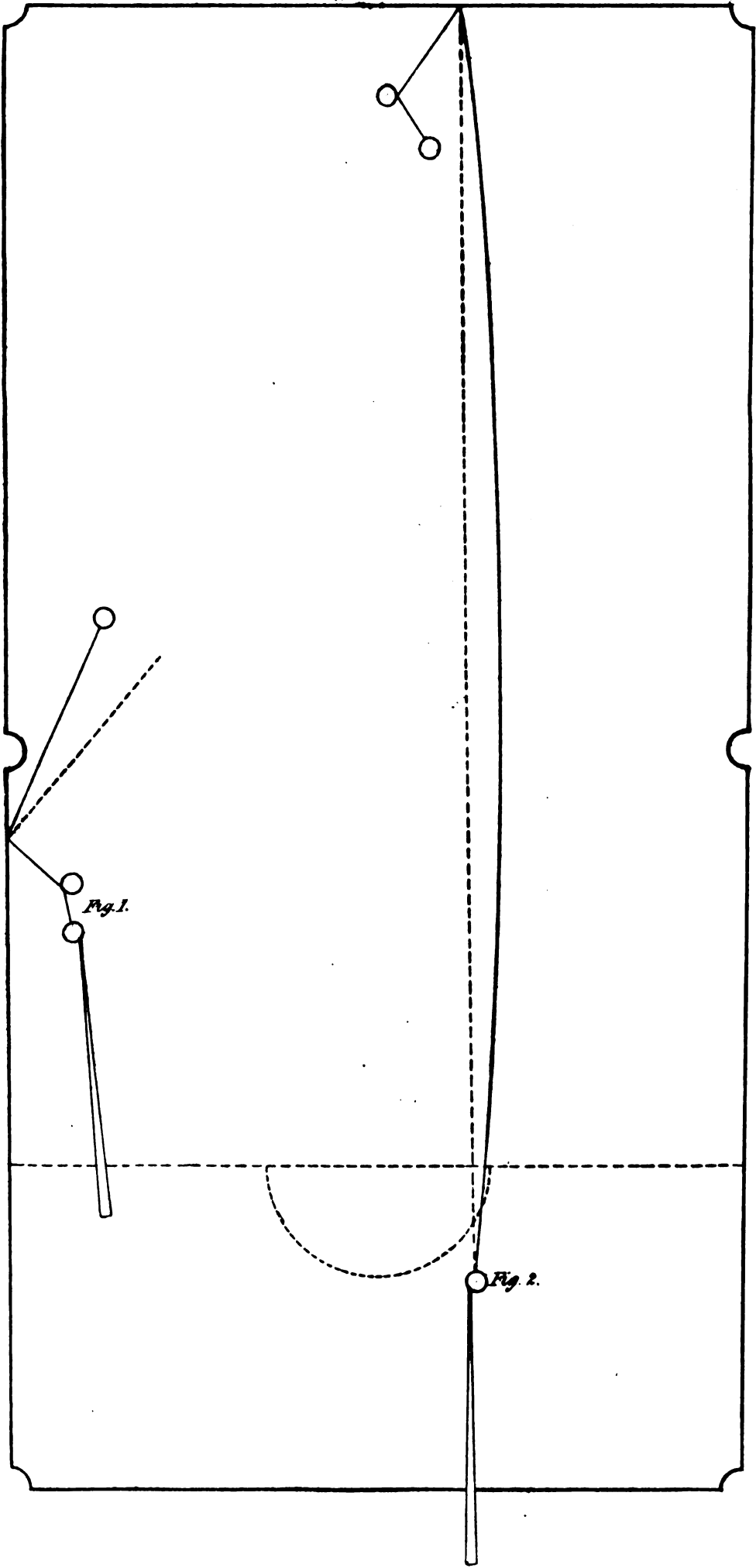
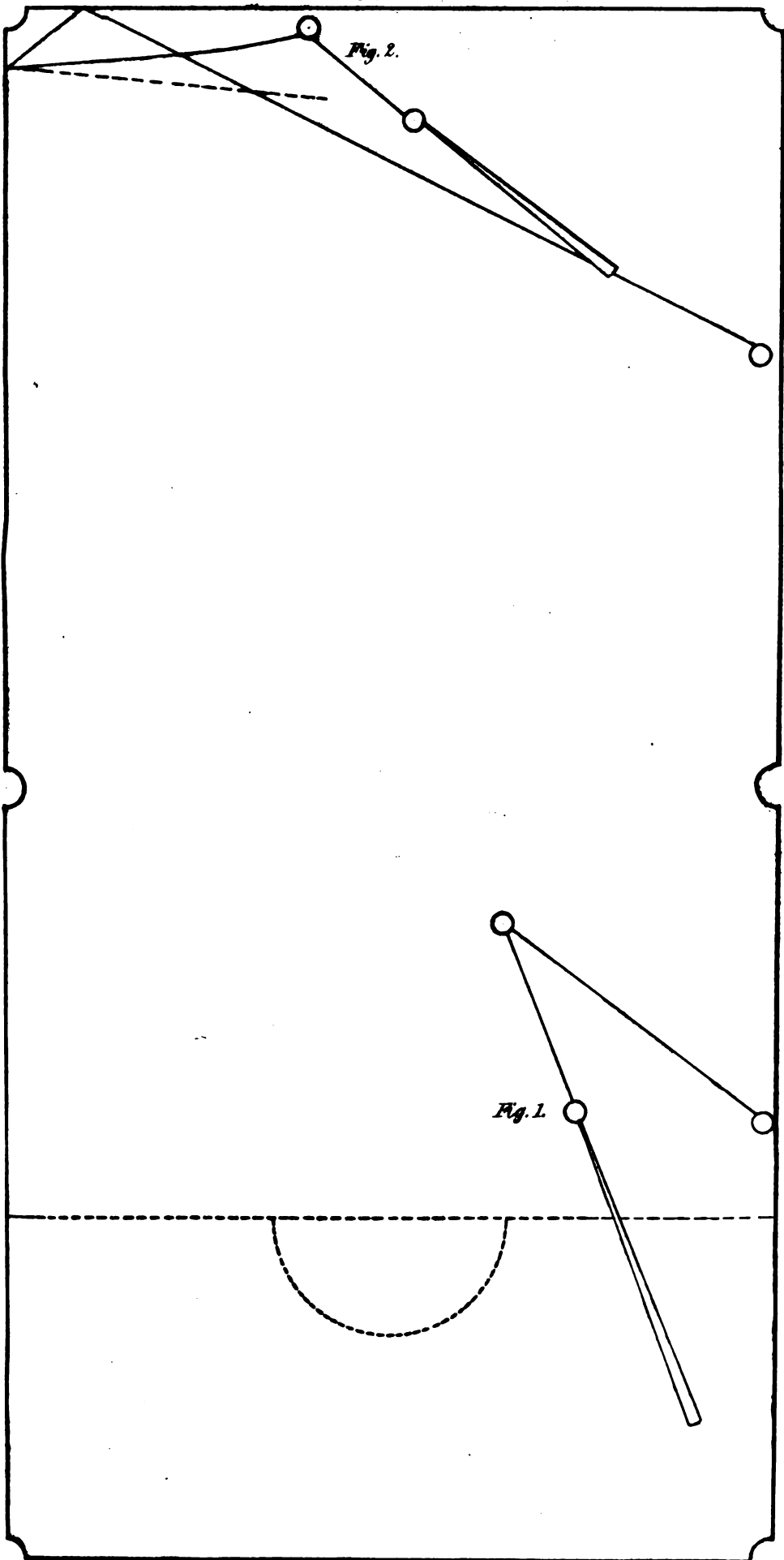


Fig. 1.



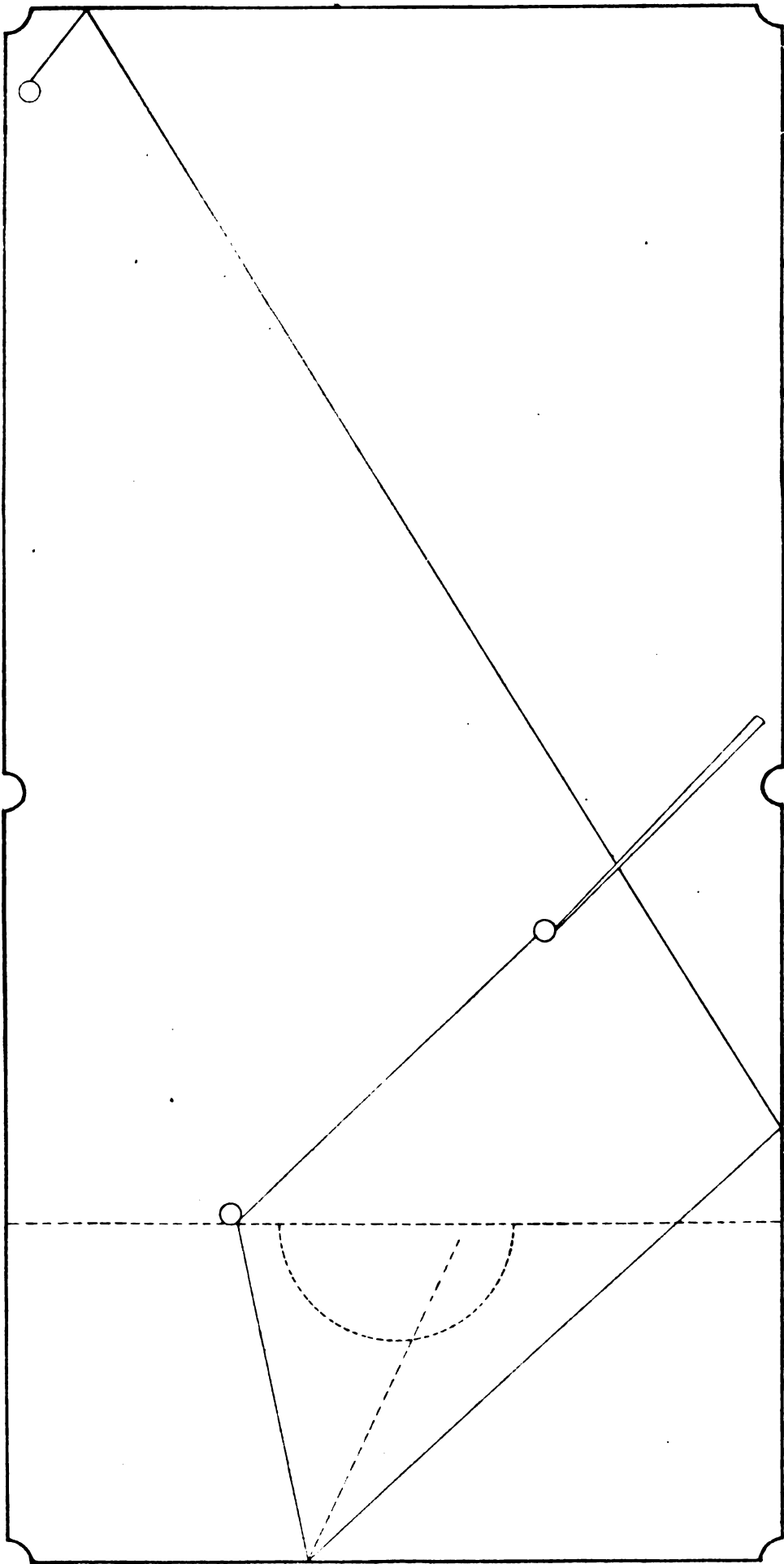


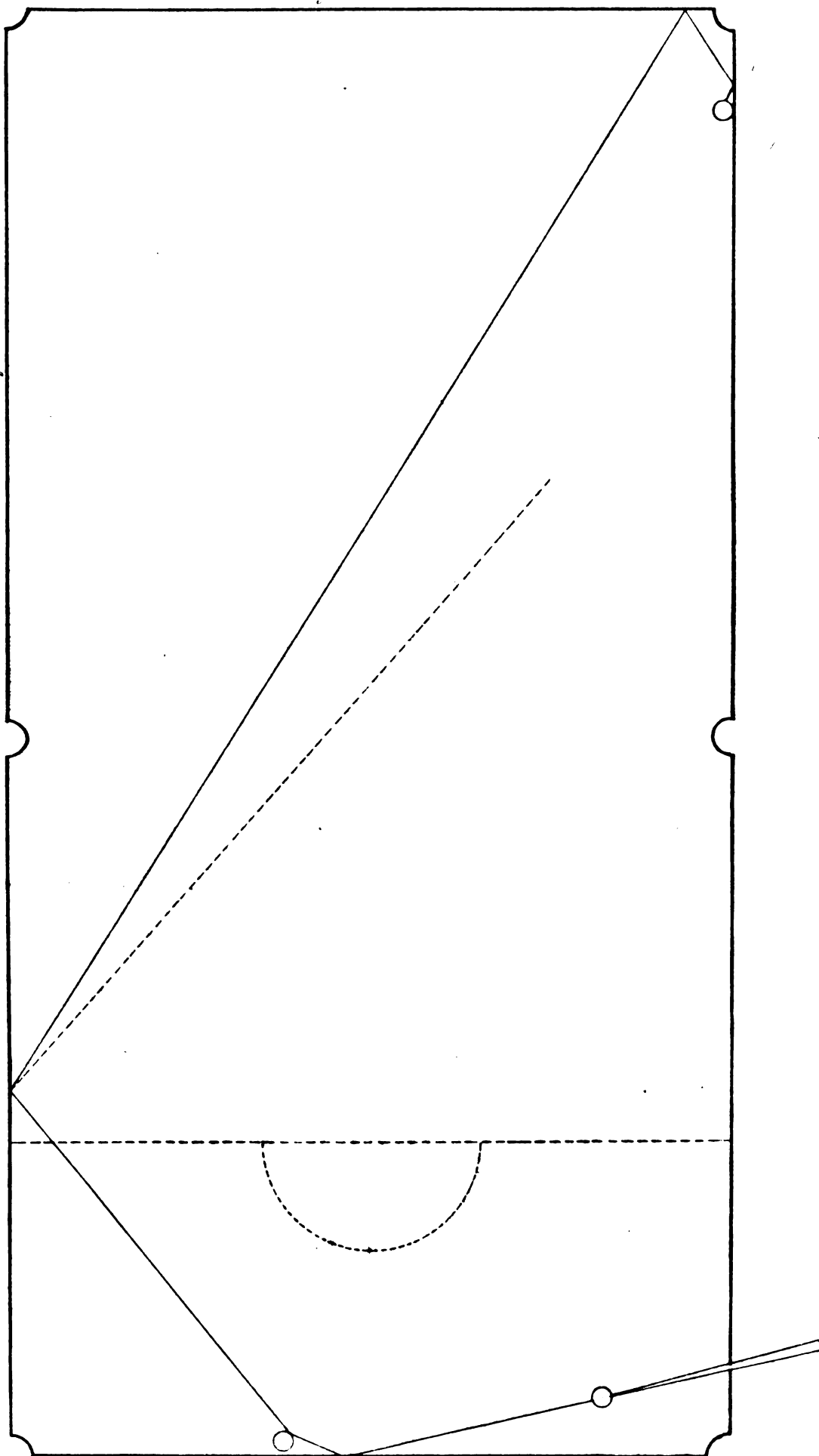


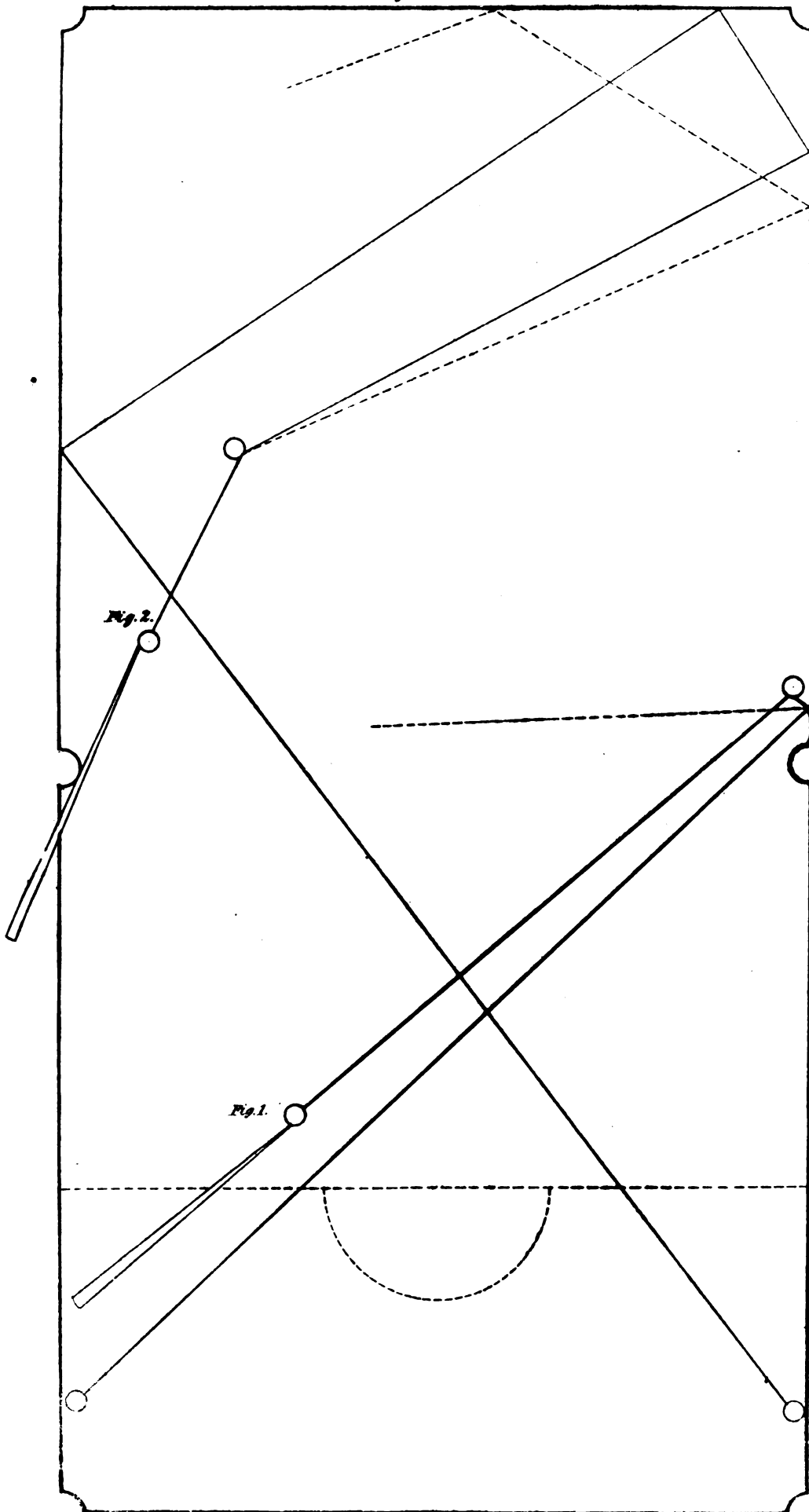


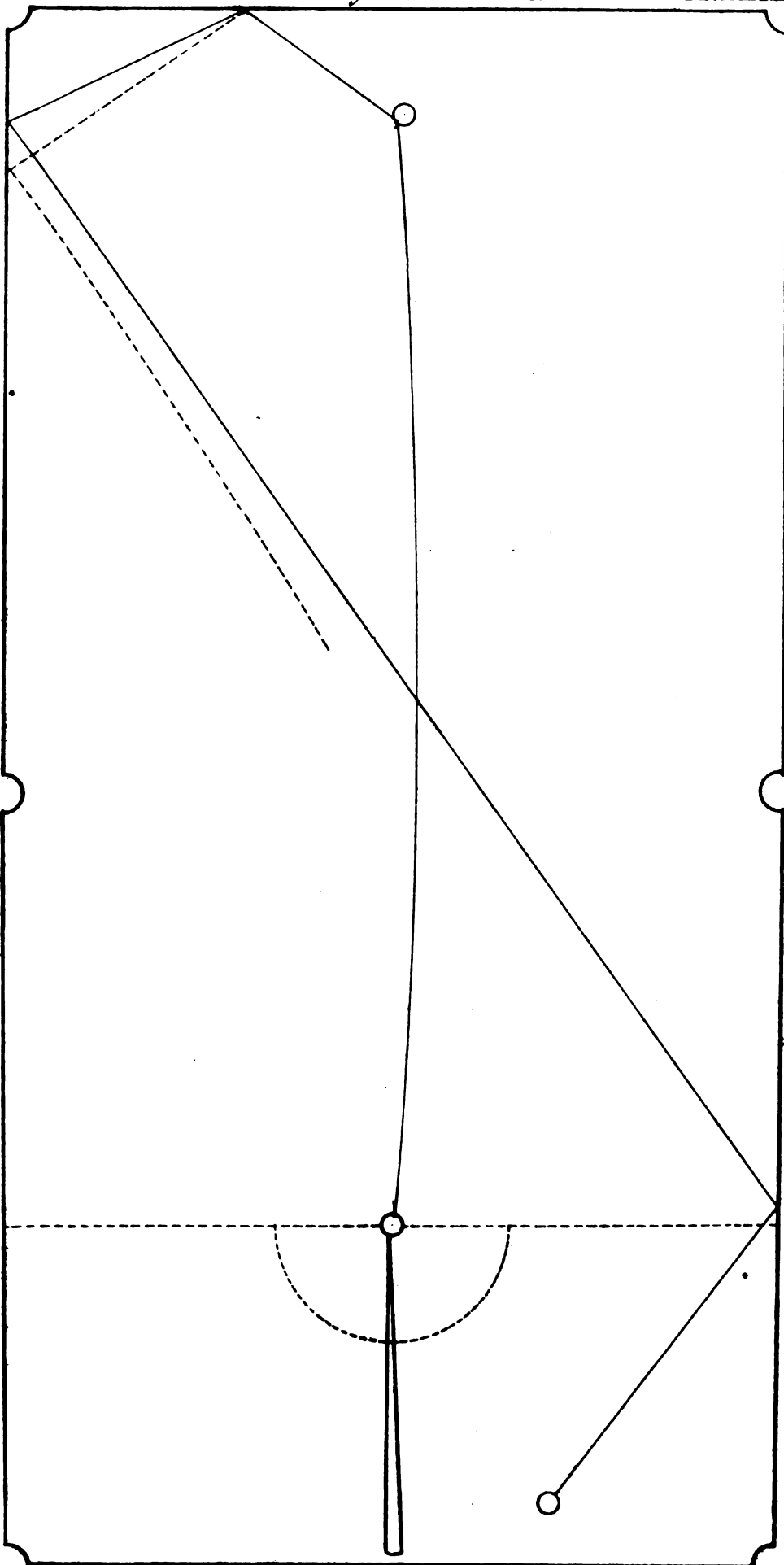
Canon by the side stroke.

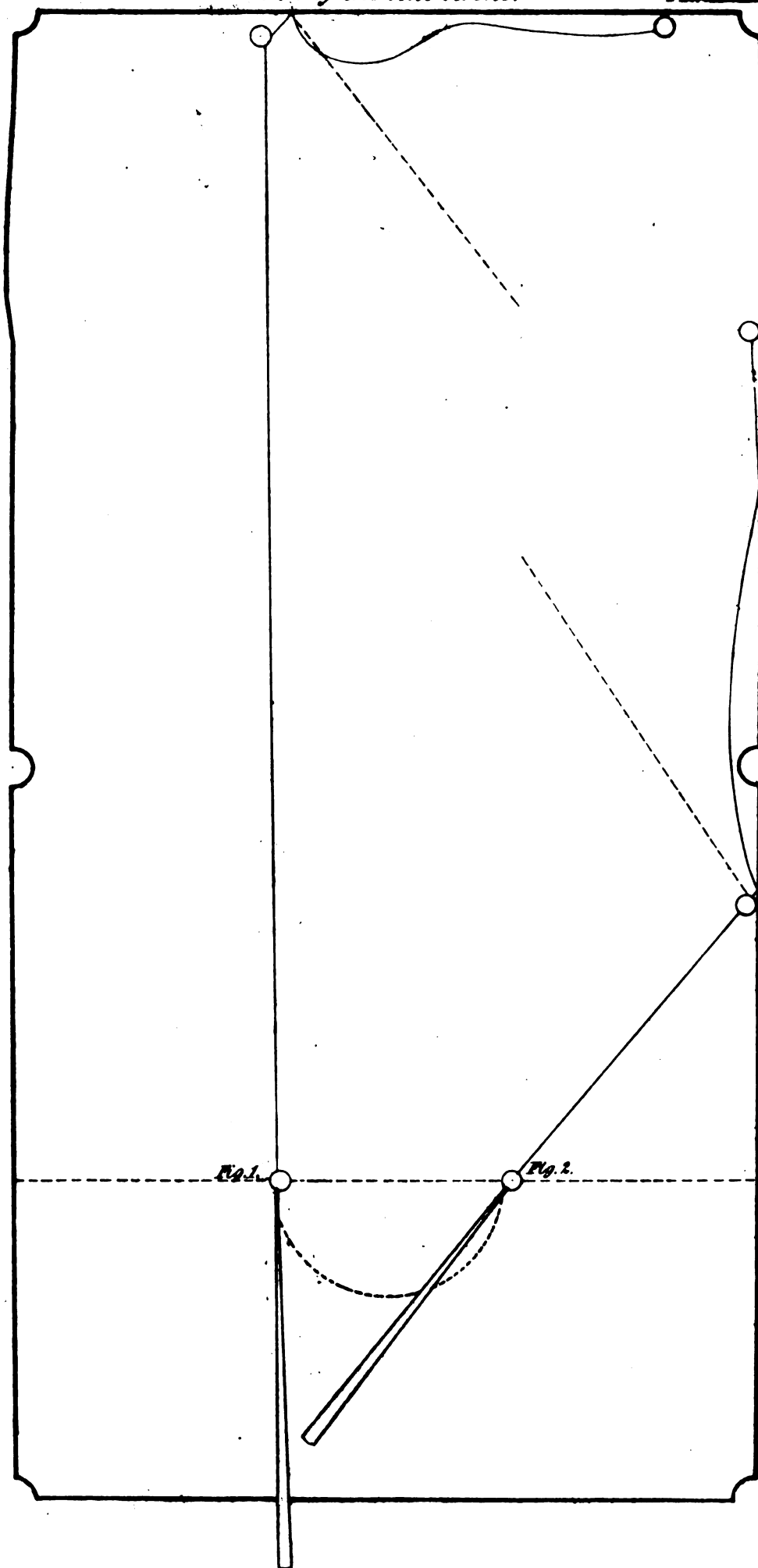
Plate XIX.

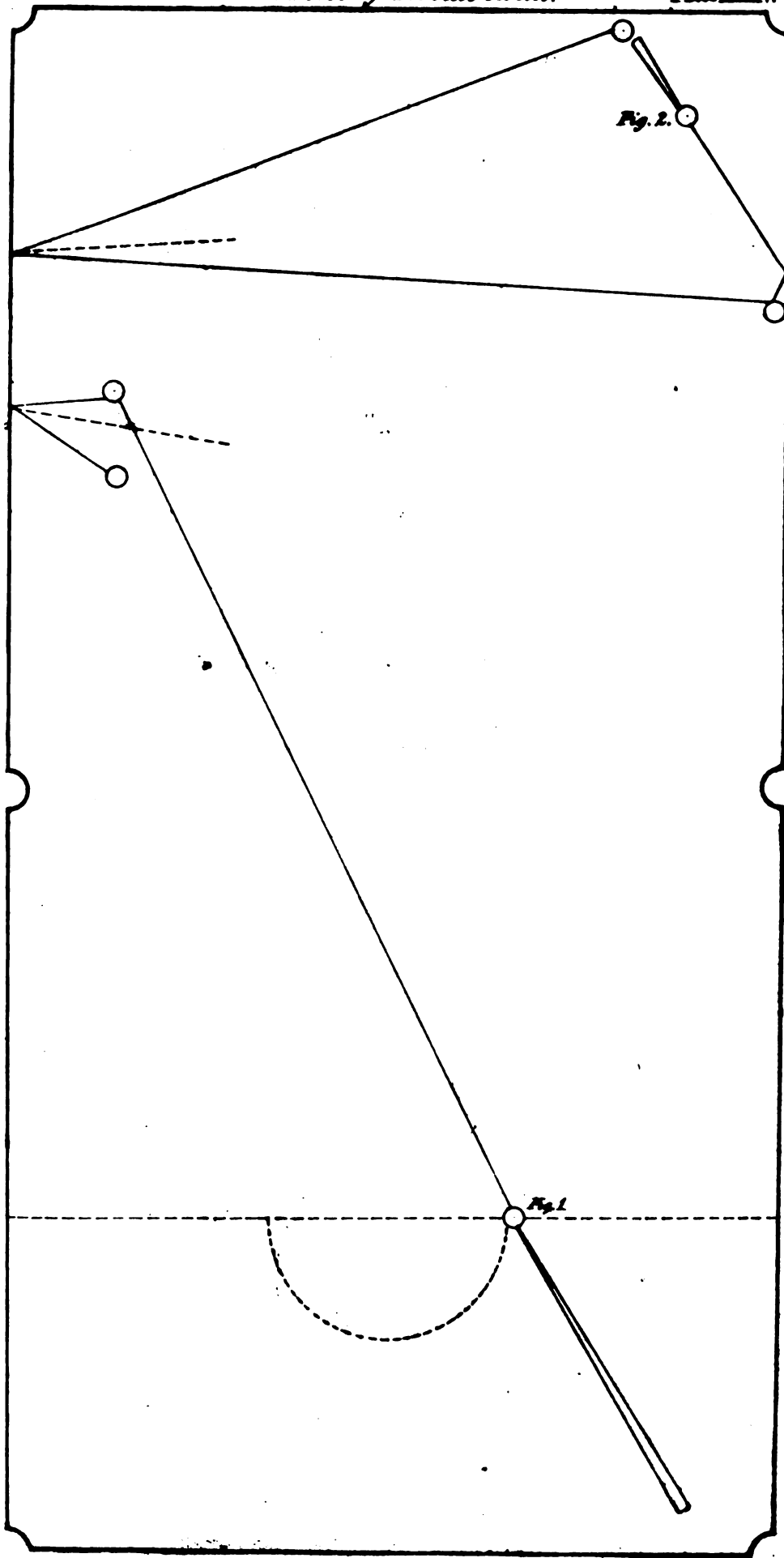


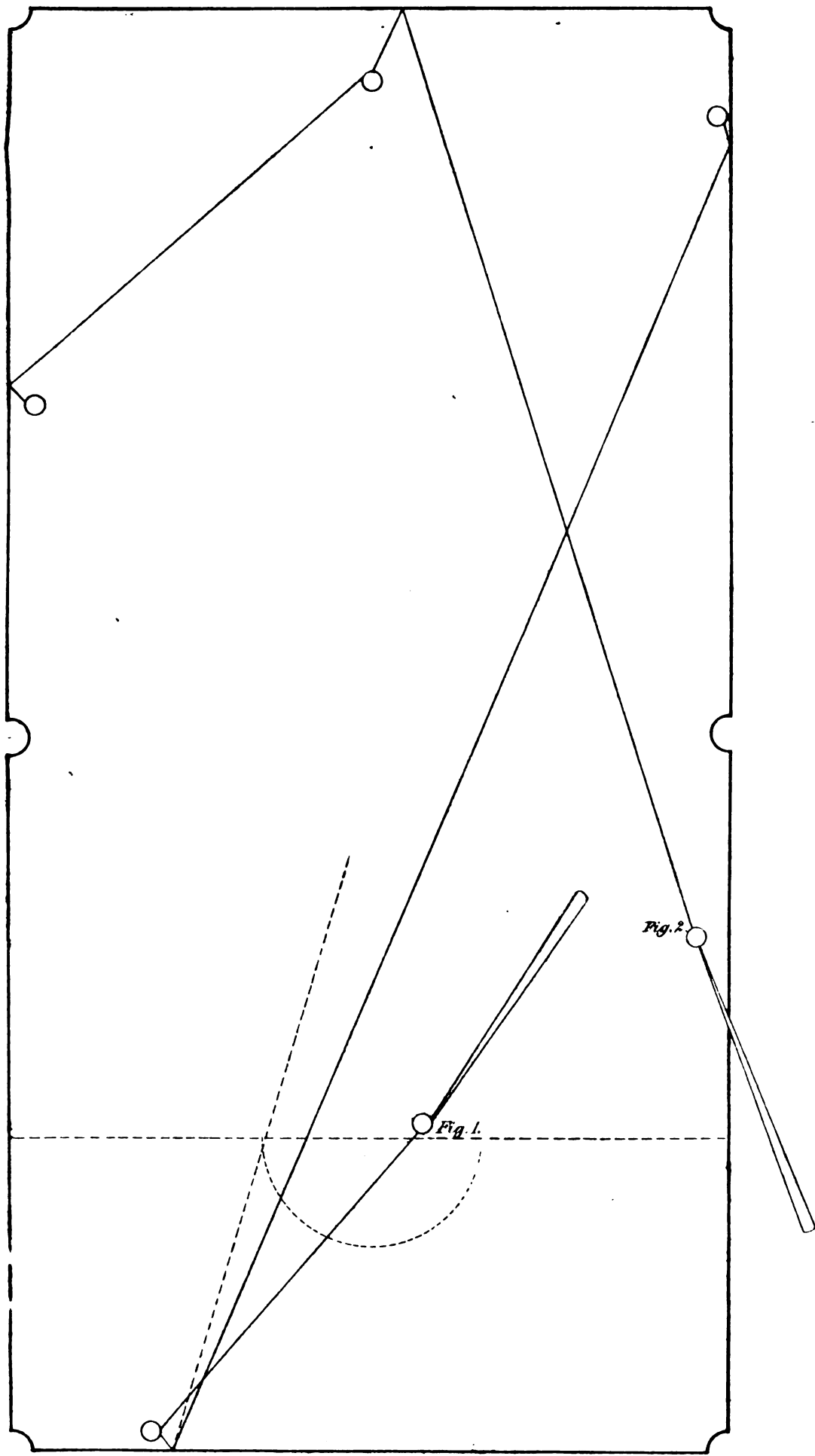


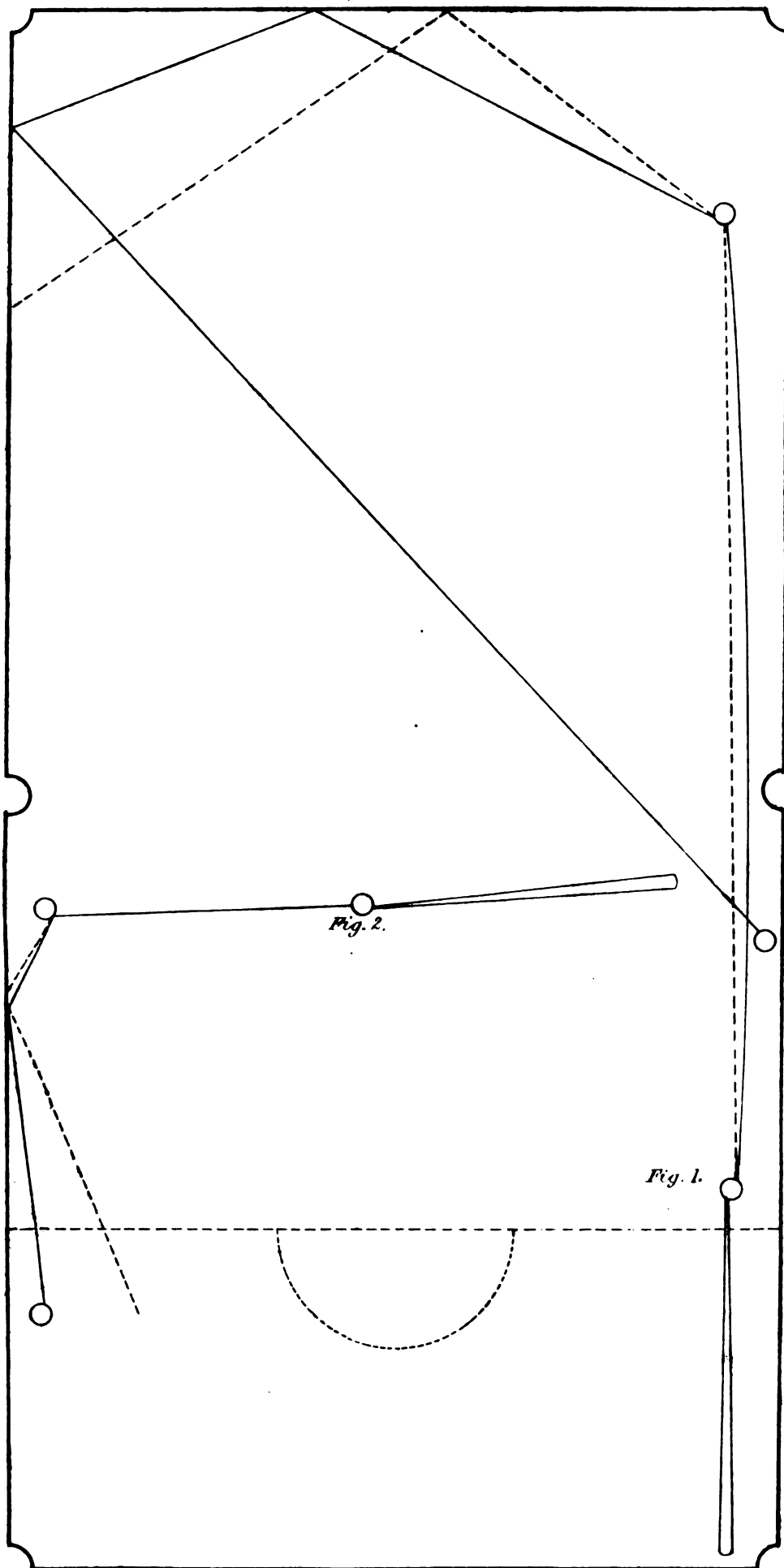


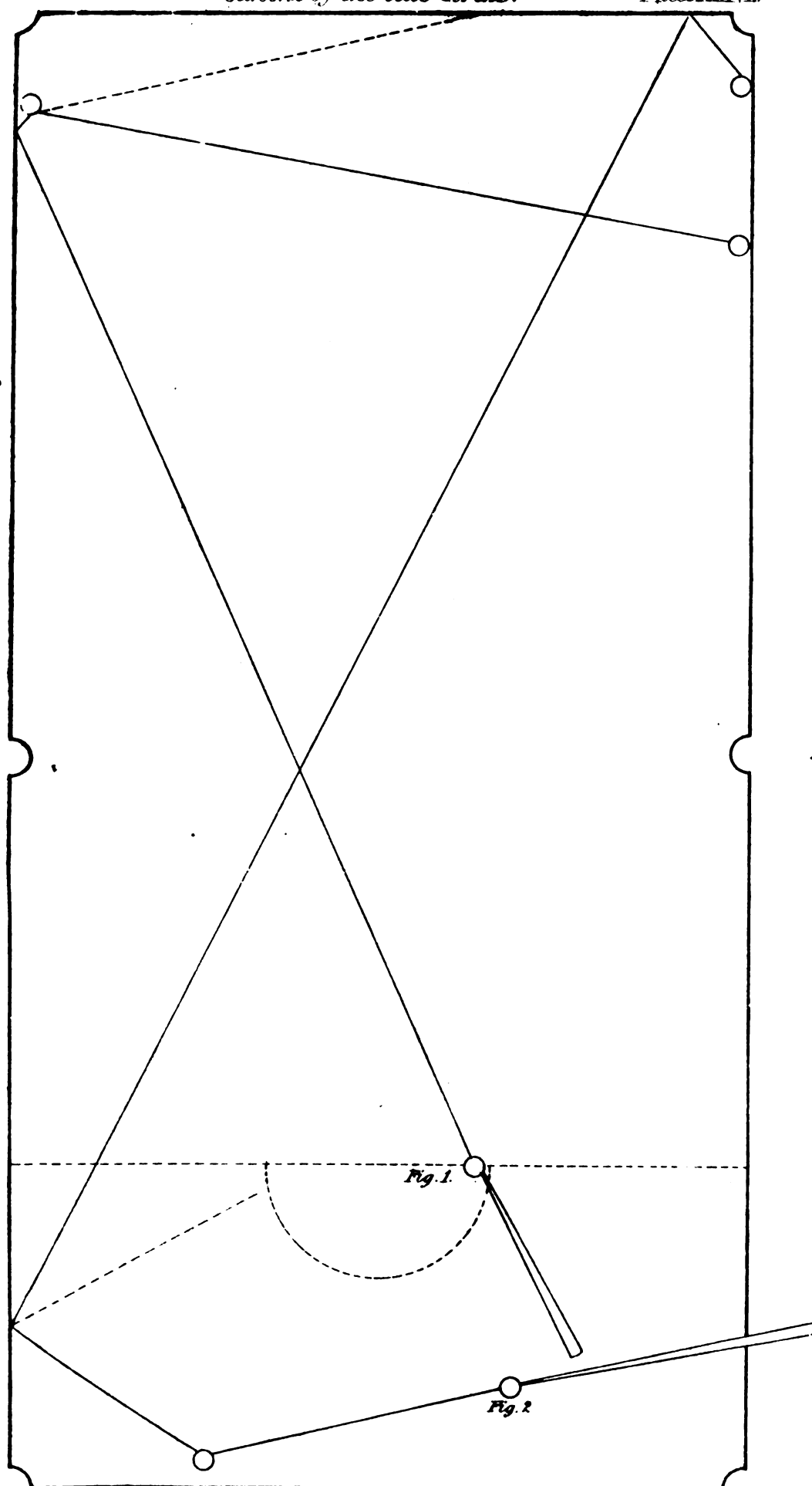


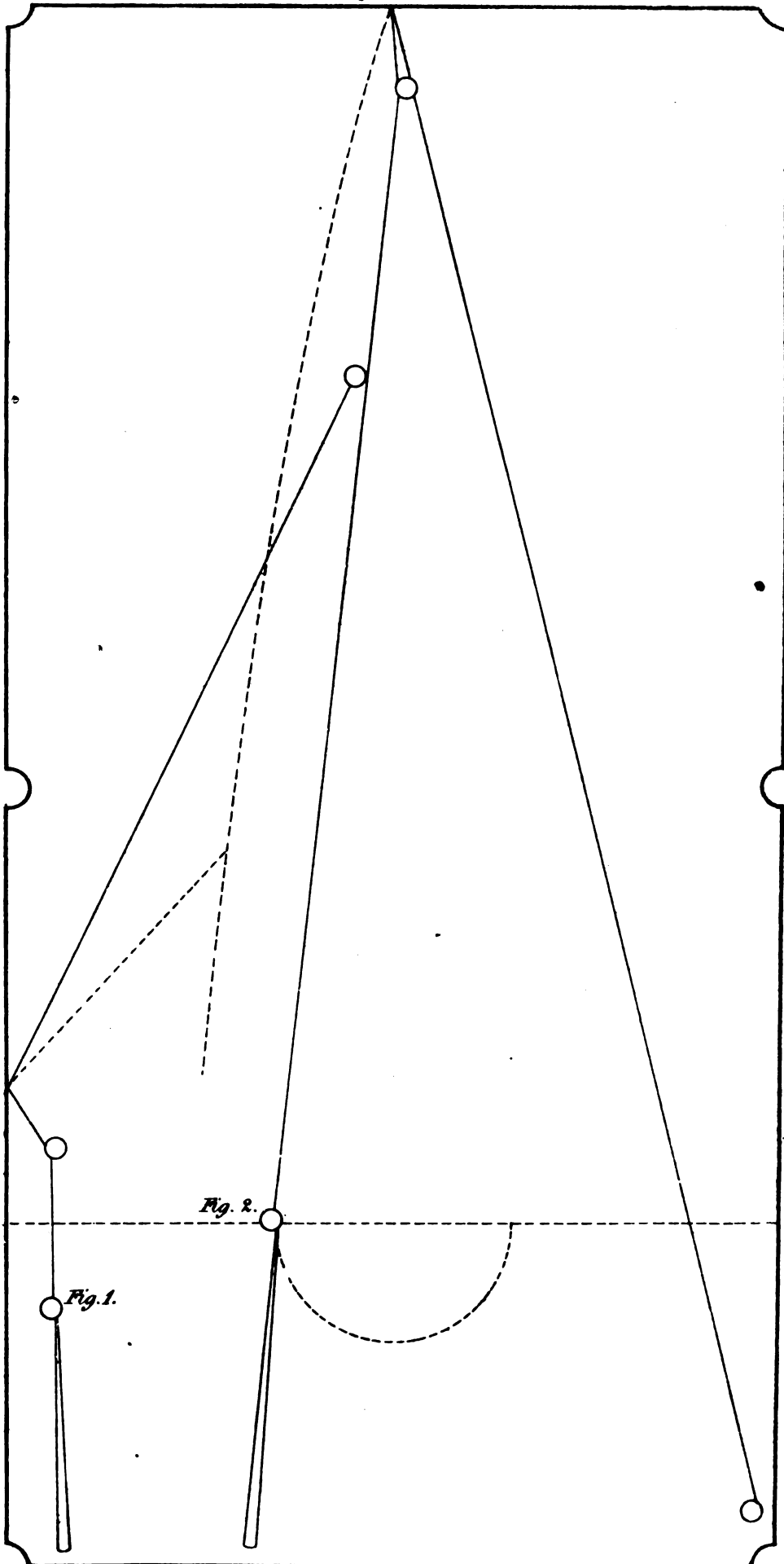






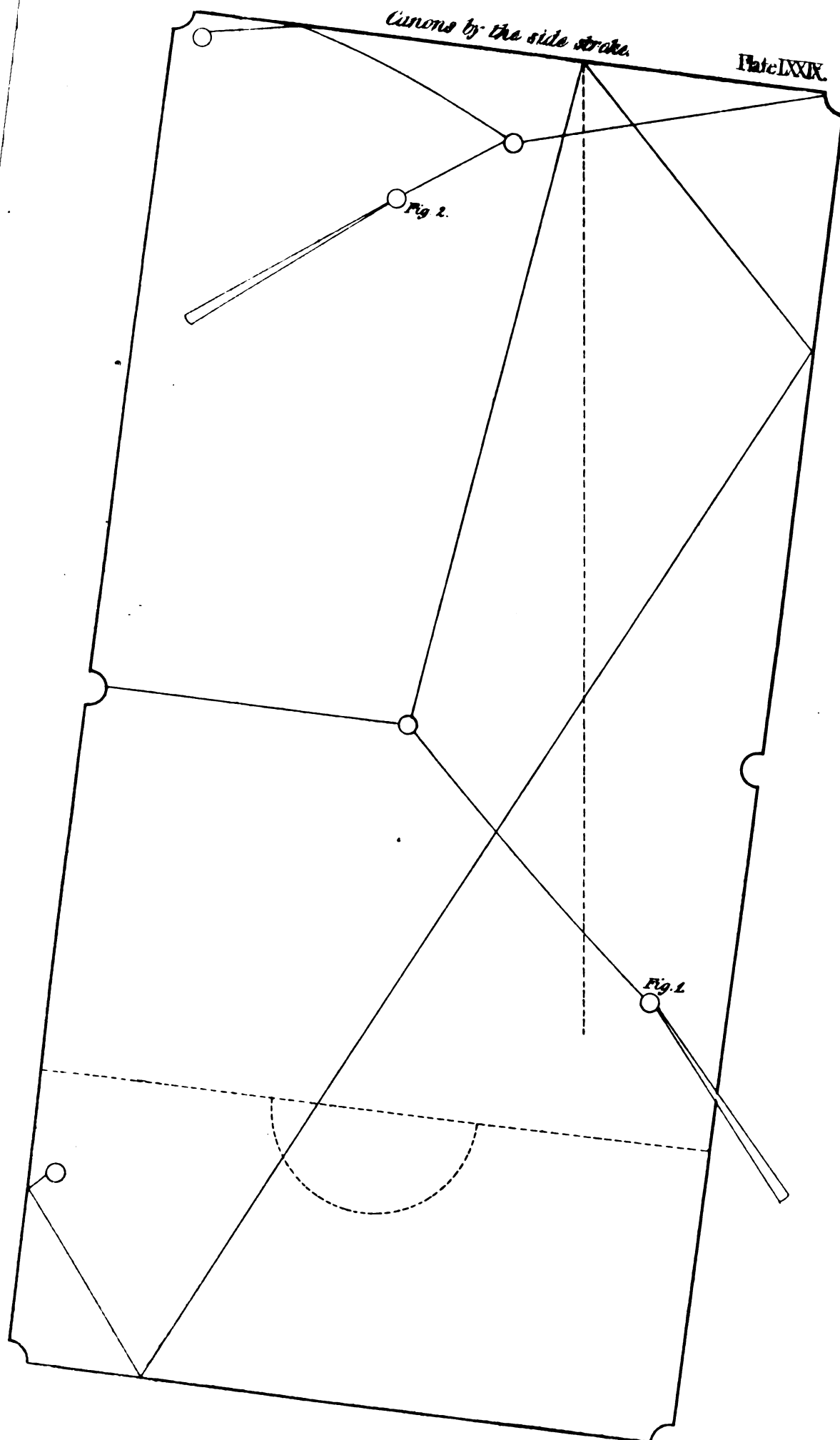


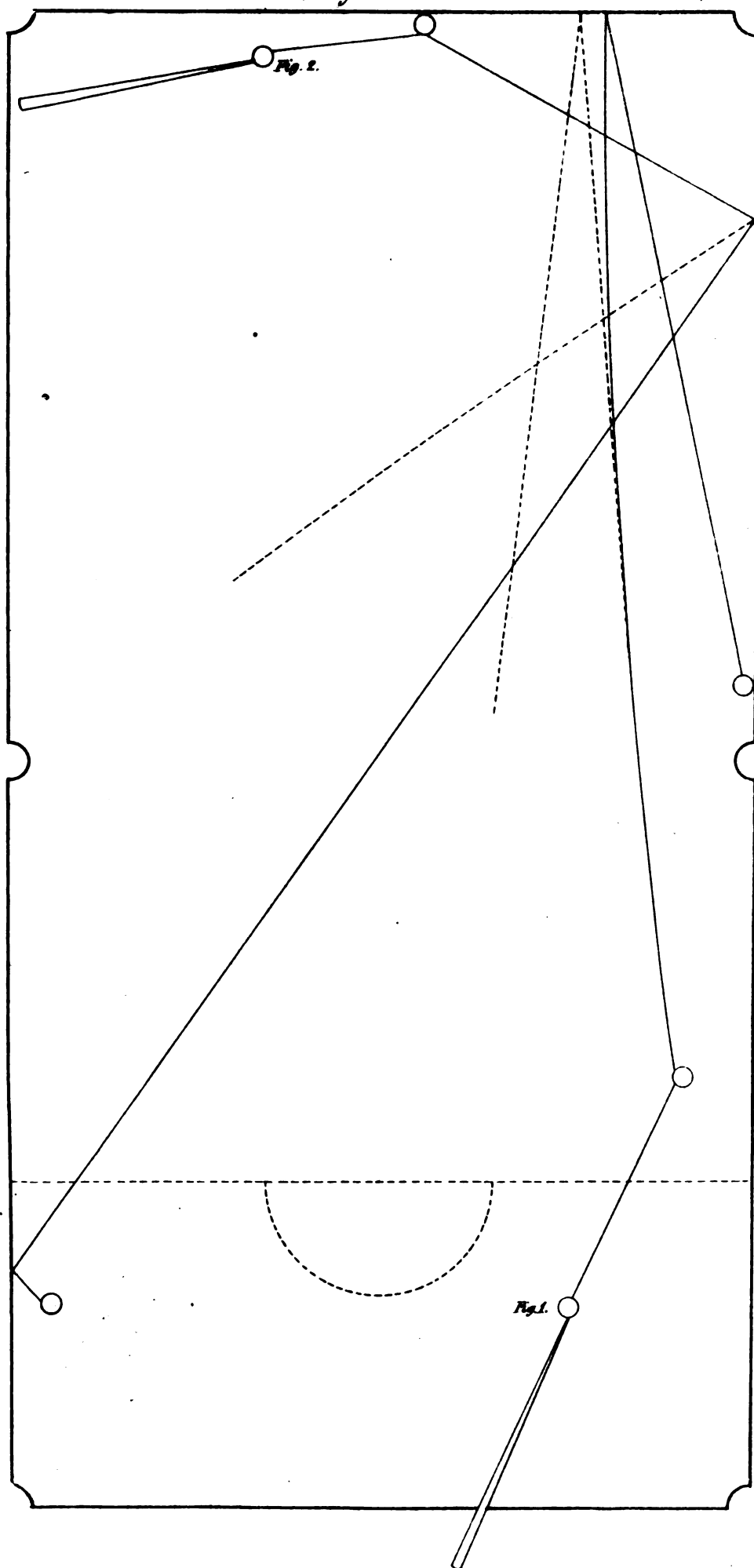


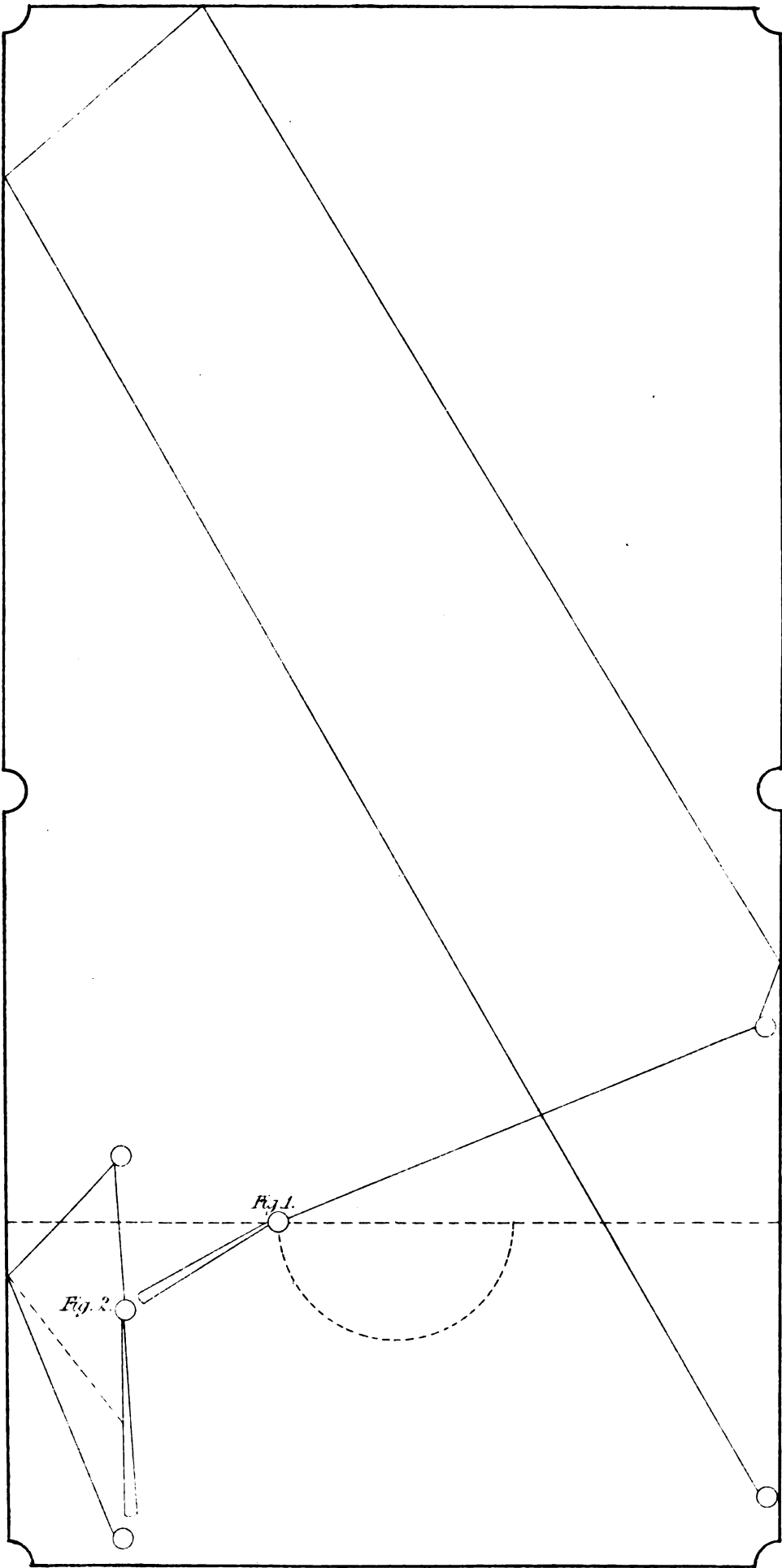


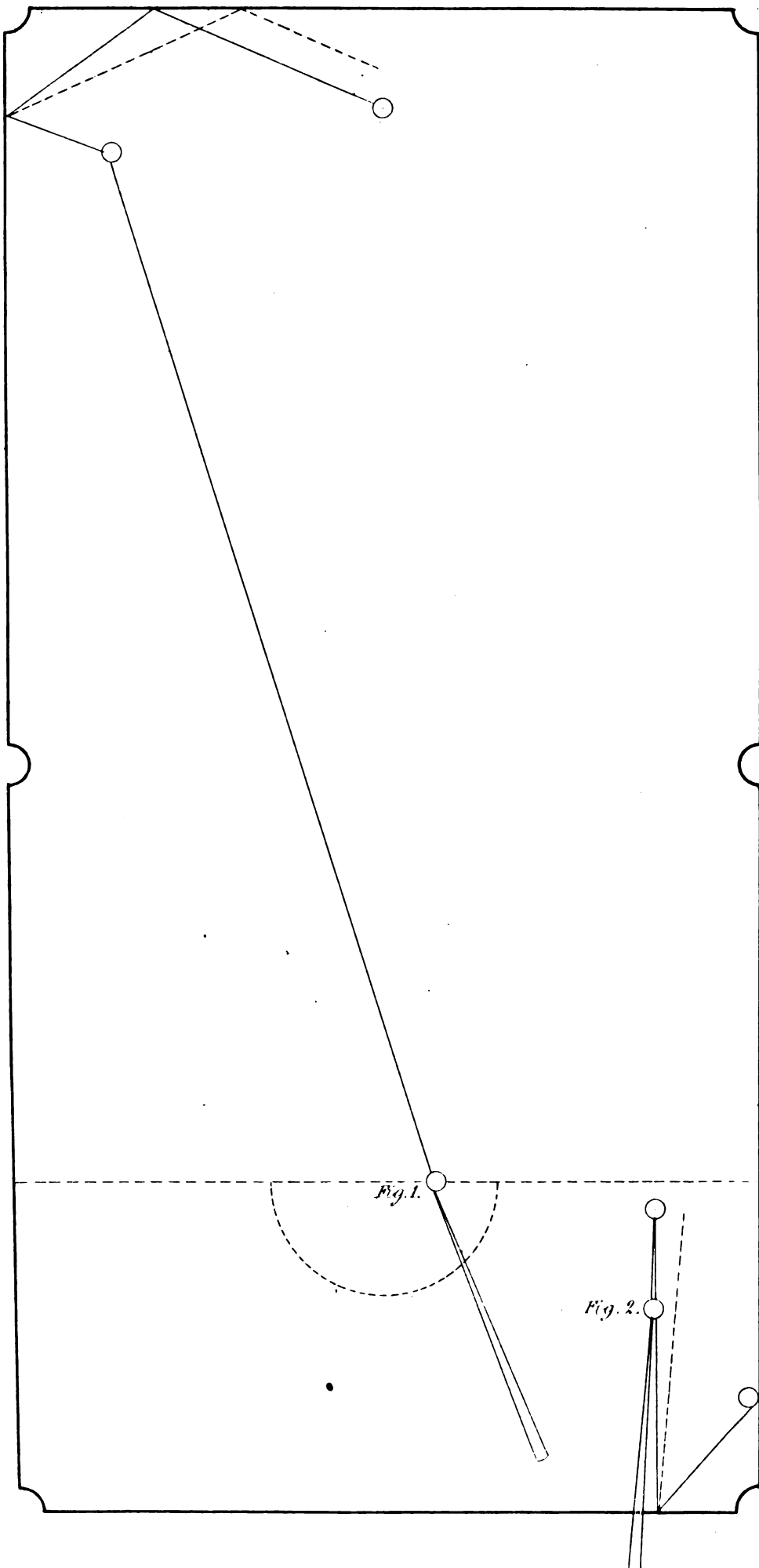
Canons by the side stroke.

Plate LXXIX.

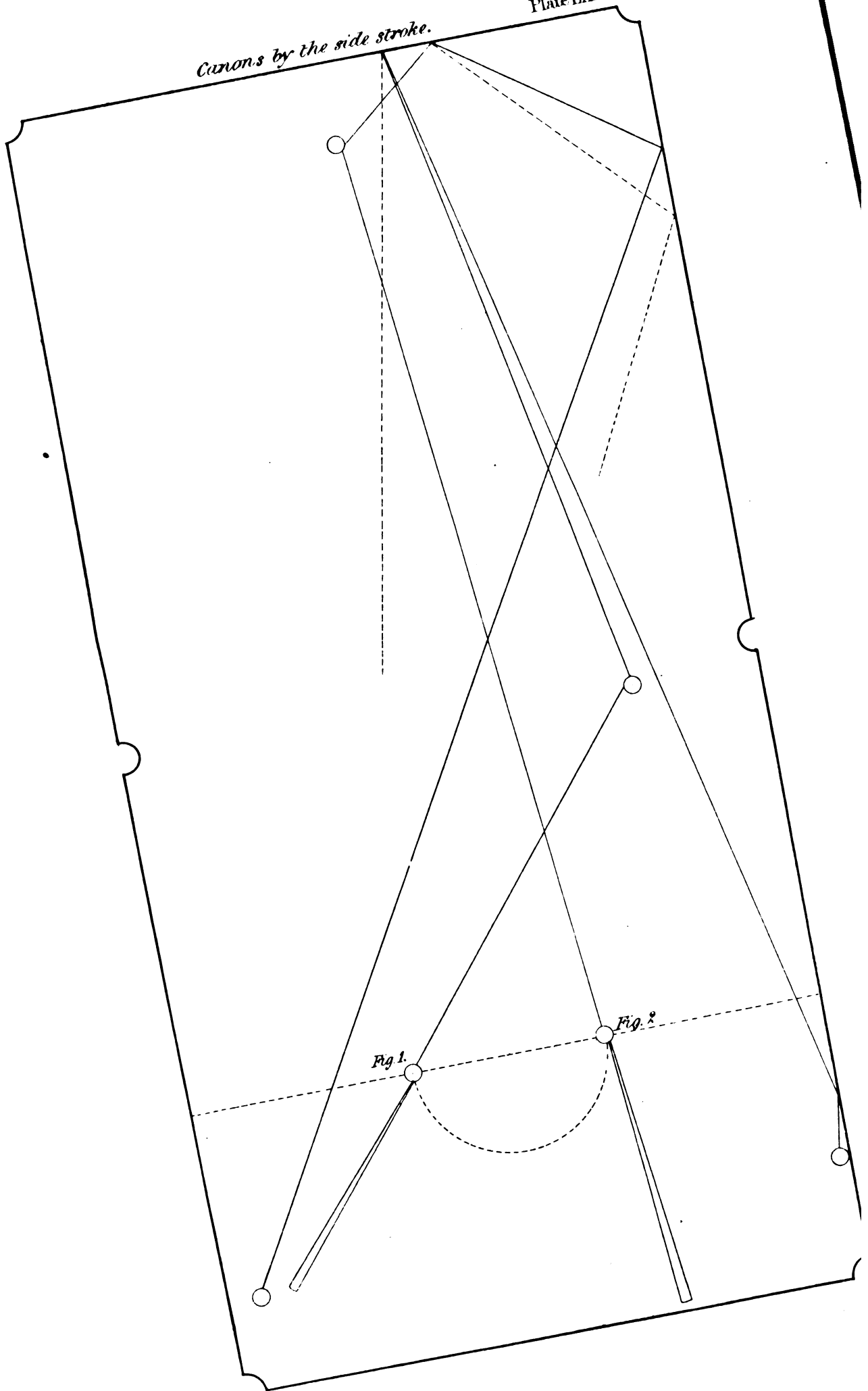


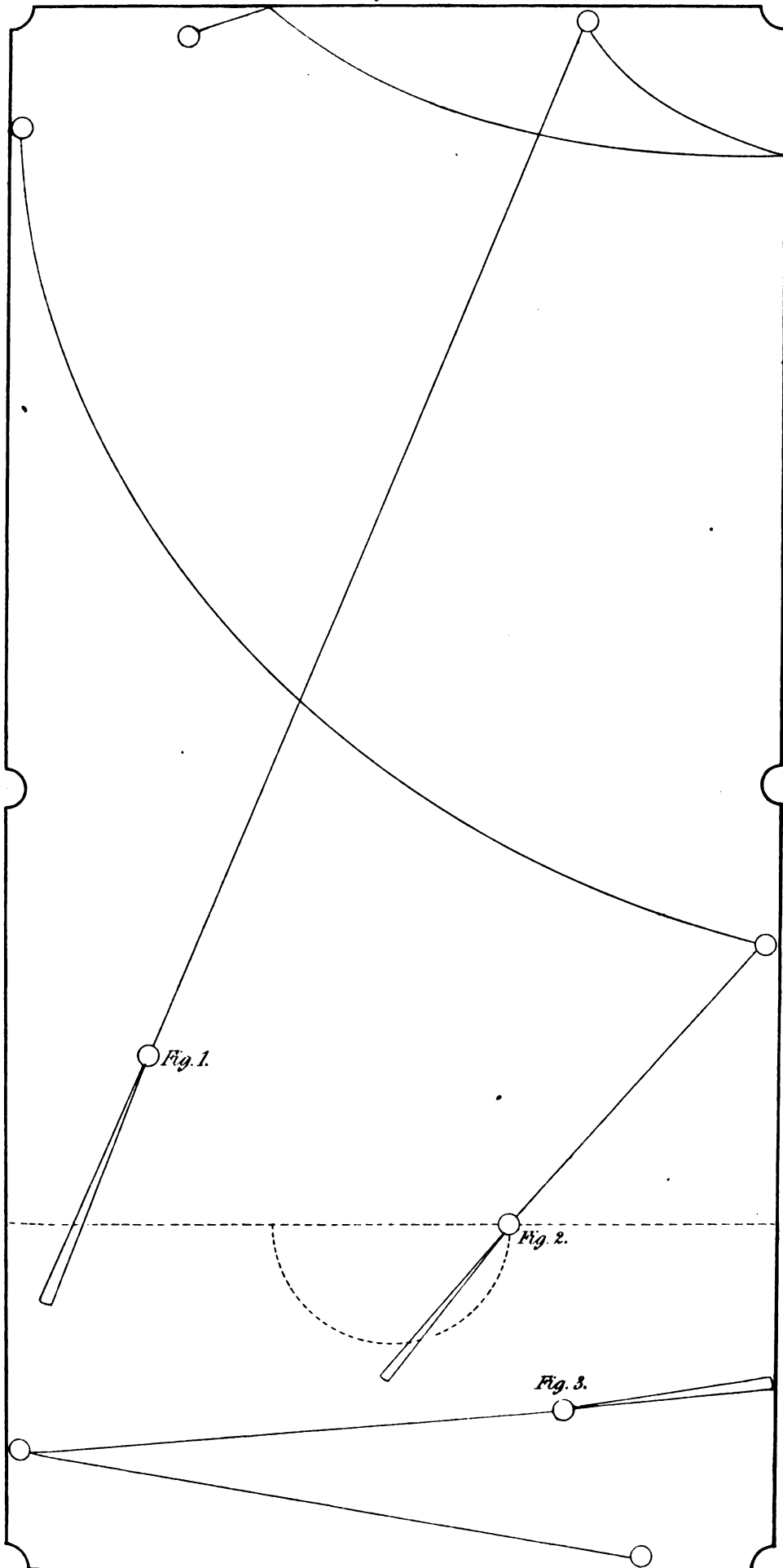


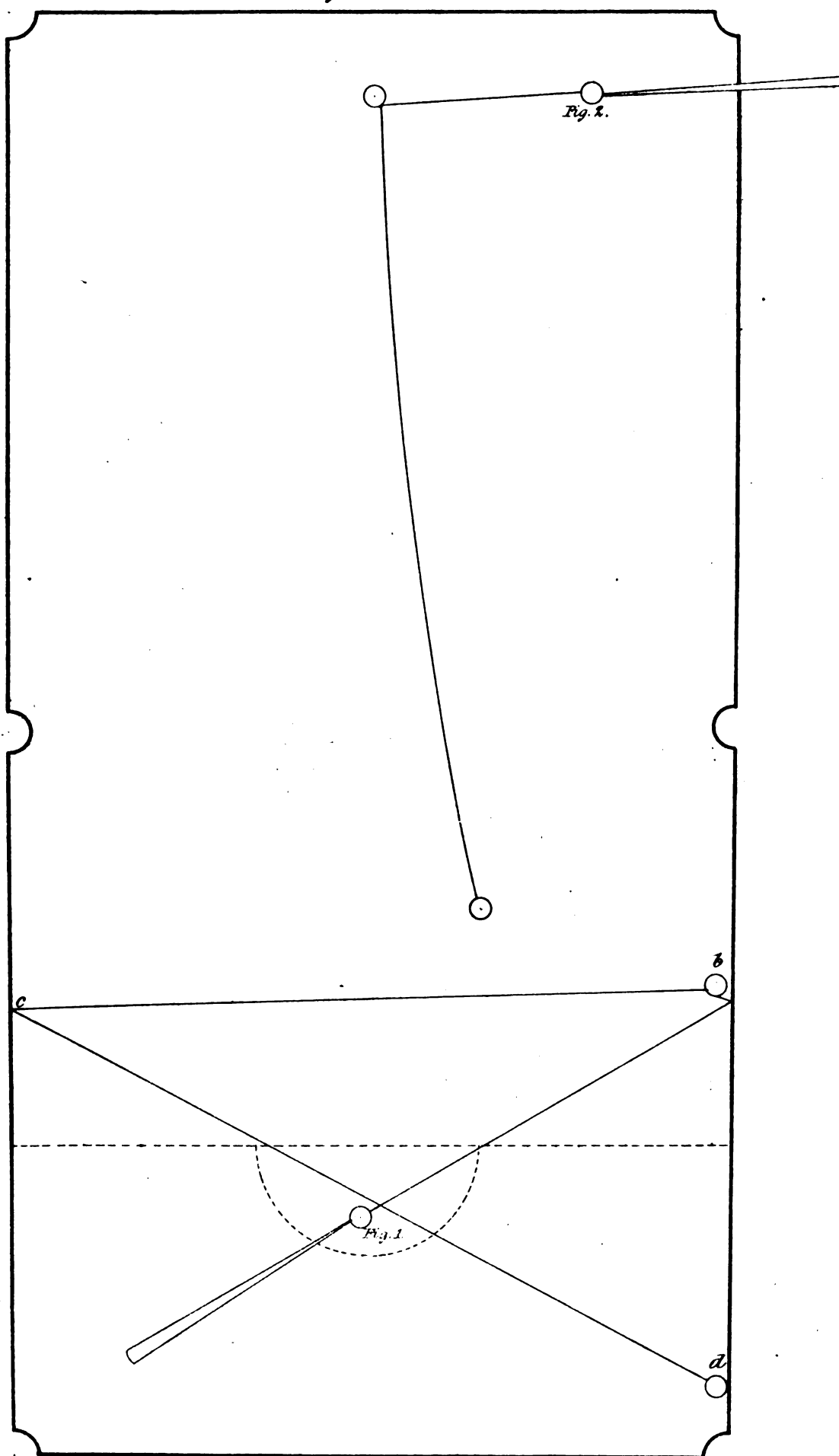


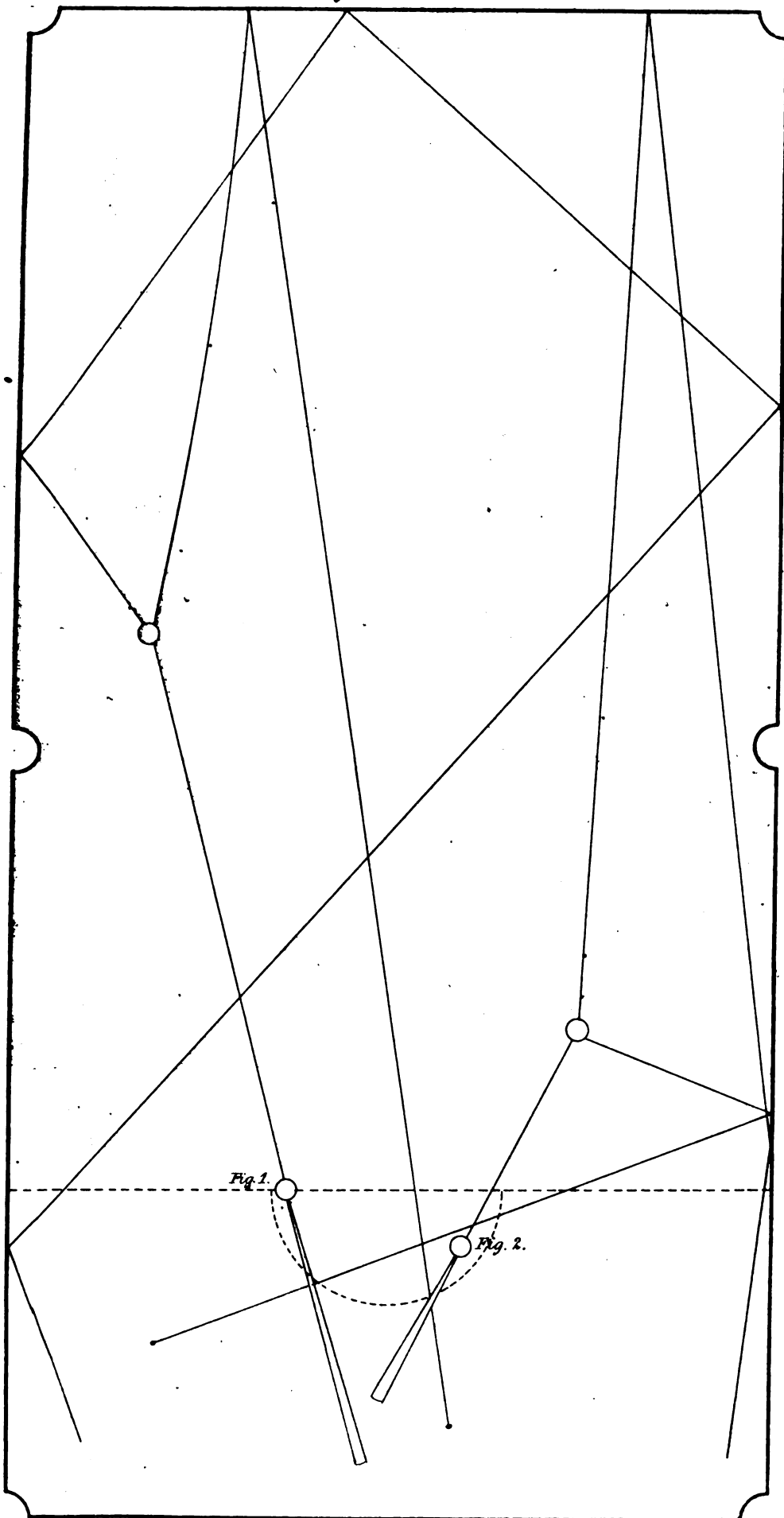


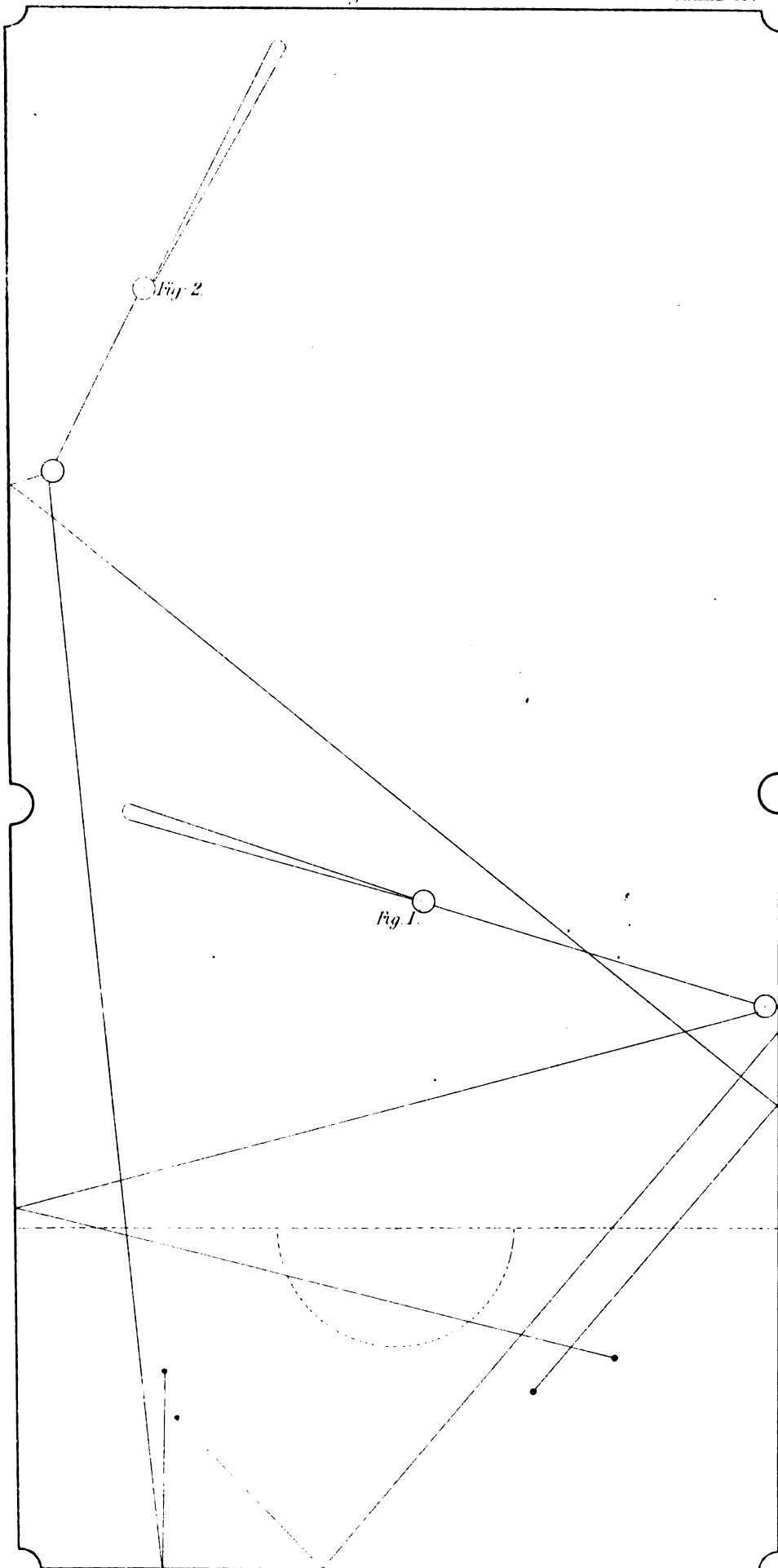
Canons by the side stroke.

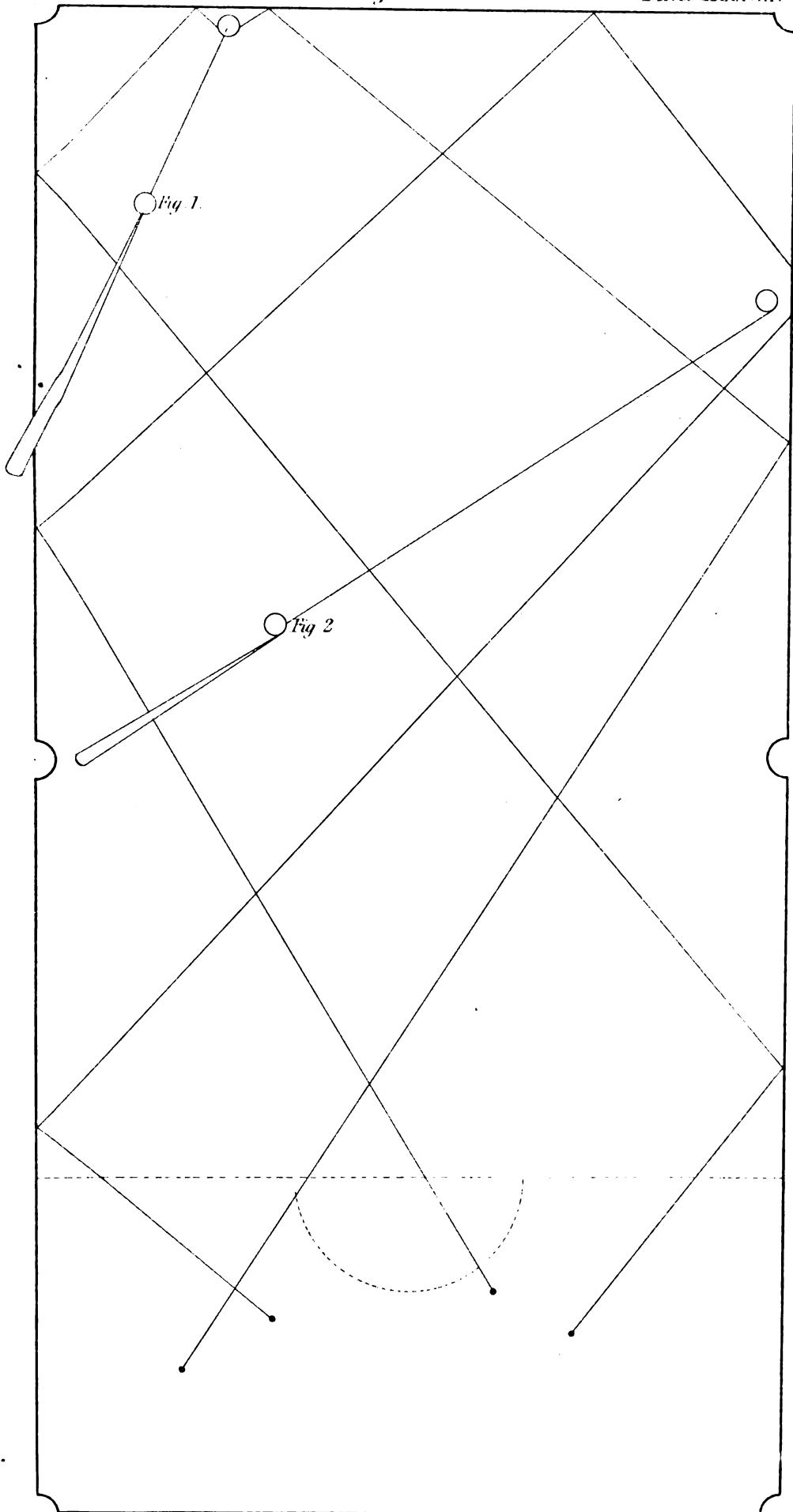


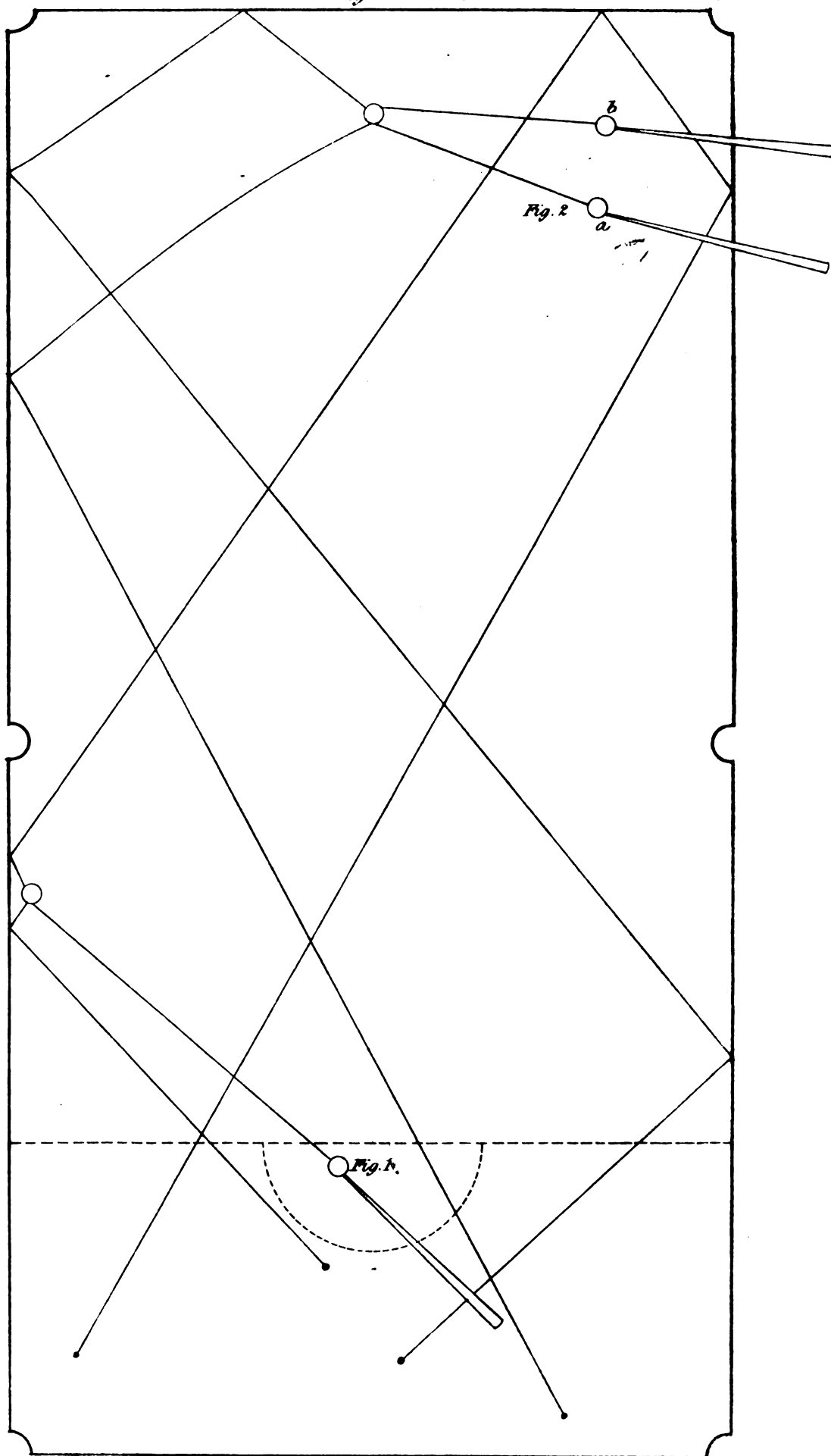


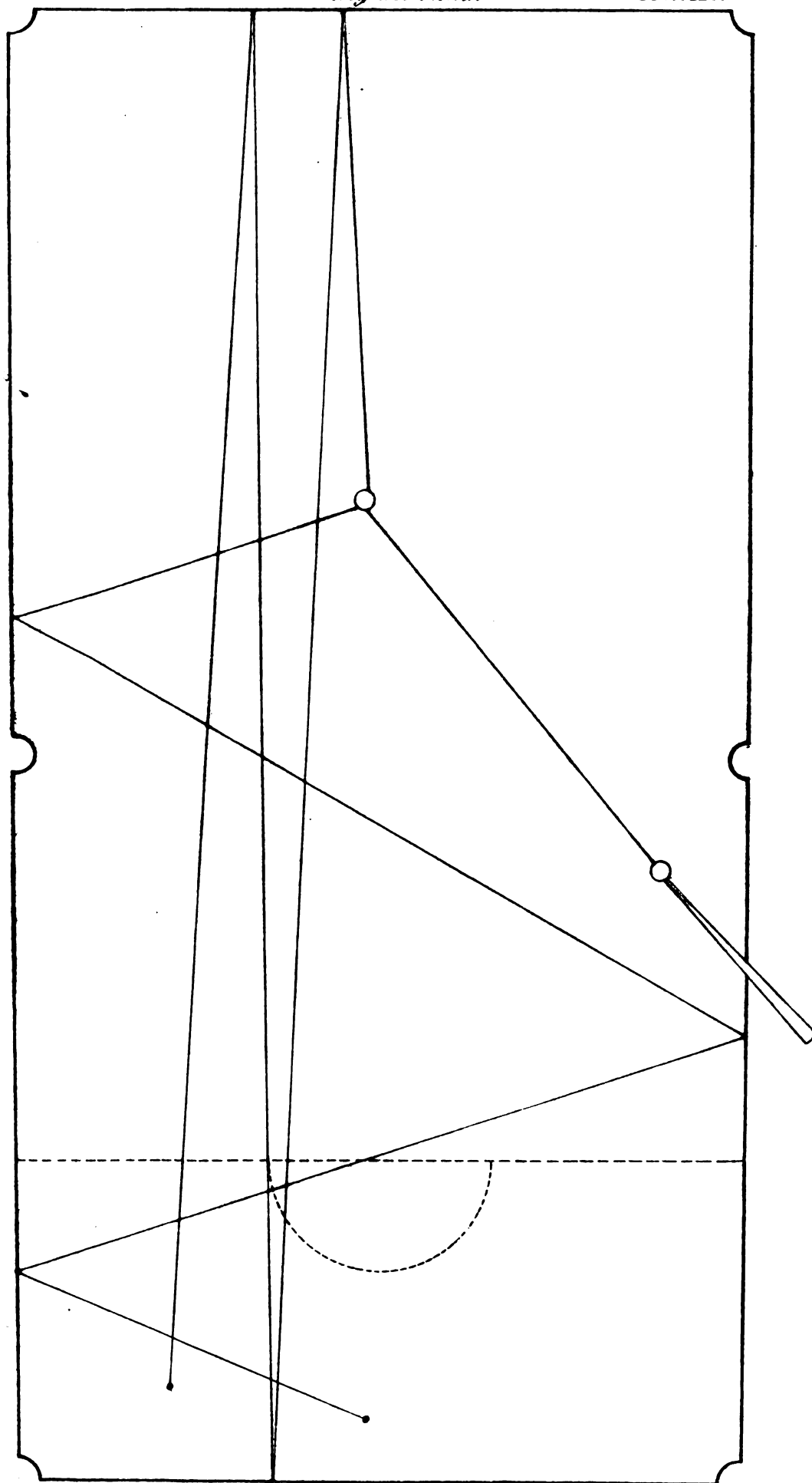












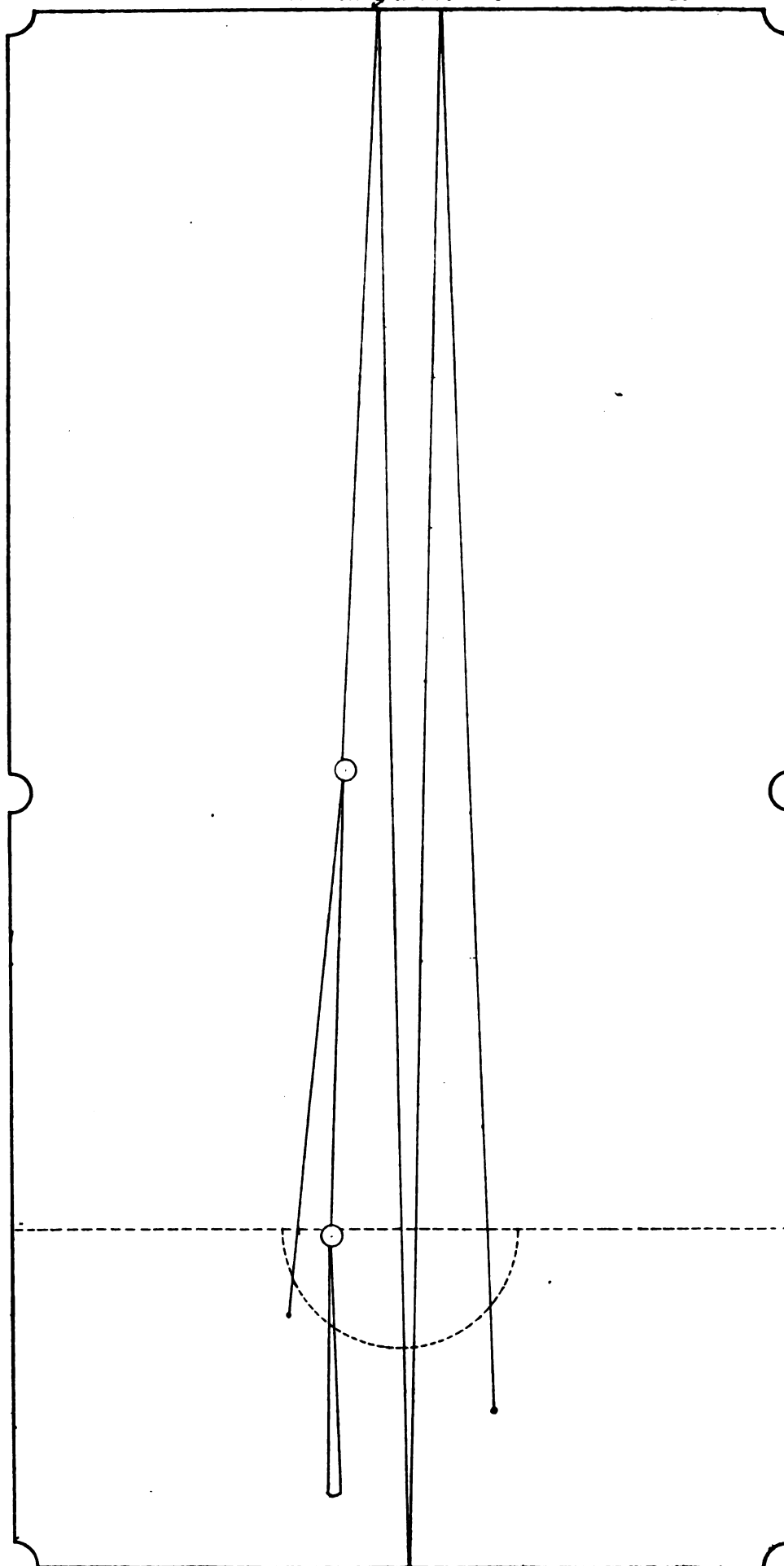


Plate XIII.

This diagram illustrates the construction of a perspective view of a rectangular object. A horizontal dashed line represents the horizon. A vertical dashed line passes through a central vanishing point on the horizon. A series of lines, including solid and dashed, represent the object's edges and their perspective projections. A small circle marks the vanishing point, and another circle marks the center of the object's base. The diagram shows how the object's true shape (dashed line) is projected onto the horizon (solid line) to create a perspective view.



