

Here, by the Cartridge is meant the Charge of Powder, made up in a Paper fit for the Piece, so that the Bullet being placed on the top of it, they may be put in together.

34. *Ram down Powder and Ball.*

35. *Withdraw your Sowerer.*

36. *Shorten it to a handful.*

37. *Return your Sowerer.*

38. *Poise your Fire-Lock.*

Do these as the Musquetiers do, according to the Instructions laid down in their Exercise.

39. *Shoulder your Fire-Lock.*

Upon this Command, the Ranks are to close forward at six Foot ; it being the Serjeants care to place their Halberts at a due distance.

40. *Poise your Fire-Locks*

Upon this, over what the Musquet requires, seize the Sling with your left hand.

41. *Sling your Fire-Locks.*

42. *Handle your Pouches.*

In handling your Pouches, let your left hands, be on the bottom, all of a height, advancing the right Legs, and the
the

the right hands being of an equal height.

43. *Open your Pouches.*

Do this altogether.

44. *Take forth your Granado's.*

Do this with the right hand extended before you.

45. *Shut your Pouches.*

Do this all at once.

46. *Uncase your Fuzee.*

Doing this, step back with the right Foot to the left, facing.

47. *Handle your Match.*

Do this with the left hand to the left side, extending your Arms, doing it nimbly altogether.

48. *Blow your Match.*

In this, the first Rank must fall back with their right Leg saltogether, giving a strong Blast.

49. *Fire your Fuzee.*

50. *Deliver your Granado.*

At this last word of Command, the second Rank must advance six foot before the first, with their Match ready to blow; and when they have observed the Words of Command, the third must advance before them; when upon the Word,

Blow

Blow your Match, the first and second Ranks are to lay their hands upon their Hatchets ; and upon the Word *Fire our Fuzes*, they are to raise their Hatchets ; and upon that of *Deliver your Granado*, the Serjeants must be careful that the first Rank stands, the second Marches six Foot before the first, and the third six Foot before the second, expecting the Word of Command with their Hatchets raised, at what time the first Rank must raise theirs likewise.

Fall on.

In this case, they must handle them fast, bringing them down.

Return your Hatchets.

Upon this you must part them into the frog of your Belt, by your side.

<i>Poise your Fire-Locks</i>	}	Do these as in case of the Fire - Lock Musquet.
<i>Shoulder your Fire-Locks</i>		

GRANA-

Granadiers, make ready.

In this, the first Rank make ready their Fire-locks, and the second Rank handle their Pouches, and the third their Hatchets.

The first Rank Present.

At this Word of Command, the second Rank must open their Pouches, and take from thence their Granado's whilst the third raise their Hatchets,

Fire.

Upon this Word of Command, the second Rank must shut their Pouches, uncase their Fuzees, and handle their Match.

Recover your Arms.

Here without any further Command, the Granadiers of the first Rank must cast over to the Left, draw and screw their Diggers into the Muzzles of their Pieces, recover their Arms, and Charge; the second Rank to advance six foot before them,

Blow your Match.

Fire your Fuzees.

Deliver your Granado.

Upon this Command, they Poise their
Fire.

Fire-Locks, and make ready, whilst the third March as the second with their Hatchets.

Fall on.

Recover your Arms.

At this last, the third Rank must March twelve foot before the first Charging, the second at six, the first returning their Hatchets, and making ready their Fire-Locks.

Recover your Arms.

Upon this, they half bend their Fire-Locks.

Cast over to the Left.

Withdraw your Daggers.

Return your Daggers.

Poise your Fire-Lock.

Shoulder your Fire-Lock.

Face to the Right-about.

March.

Upon this last, 'tis the Serjeants Duty to be carefull, that forward, the Ranks open to twelve foot, and that they so continue Marching till they come to their Ground. where they must halt without any Word of Command.

As

As you were.
Poise your Fire-Locks.
Order your Arms.
Lay down your Arms.
Quit your Arms.
Face to the right-about.
March.

In these, observe the Posture of the Musquet.

Here observe, that when you are clear of your Arms, you are to disperse, and upon the Drum beating, you must hast to your Arms with a chearful Huzza, your Daggers drawn, lifted with their Points upwards.

Return your Dagger.
Handle your Arms.
Order your Arms.
Poise your Fire-Locks.
Shoulder your Fire-Locks.

Observe these as the Exercise of the Musquet Fire-Lock, and the rest, as they have been laid down, and you may grow expert.

*The Dragoons, Exercise of Musqueteers
on Horse-back.*

IN this, to shorten any tedious Prologue or Intricacy, we will suppose the Dragoons to be ready in the Field, drawn up in three Ranks, having advanced their Musquets, the Officers taken their Stations, and all things in a readiness for the Word of Command.

1. *Dragoons have a care.*

2. *Sling your Musquets.*

3. *Make ready your Lings.*

4. *Clear your right Foot of your Stirrop.*

5. *Dismount.*

Here they stand ready at their Horses heads, and the six out-side Men continue mounted, that they may hold and guard the Horses.

6. *Link your Horses to the Left.*

7. *March clear off your Horses, and Shoulder as you March.*

8. *Halt.*

Upon these Words of Command, the Battalion by the care of the Officers, is to be formed at the Foot, *viz.*

1. *HAVE*

1. *Have a care of the Exercise.*
2. *Officers to the Right about.*
3. *Take your Posts in the Rear of the Battalion.*

4. *March.*

In this Ordering, the Serjeants and Corporals must fall into the Flank, and Rear of the Battalion, and the Commission Officers form a Rank in the Rear.

5. *Dragoons have a care.*

Upon this they must pull of their right hand Gloves, and stick them in their Girdles.

6. *Joyn your right hand to your Musquets.*

7. *Poise your Musquets.*

8. *Rest your Musquets.*

9. *Cock and Guard.*

10. *Present.*

11. *Fire.*

12. *Recover your Arms with the Cock half bent.*

13. *Rest upon your Musquets.*

14. *Handle your Daggers.*

15. *Draw forth your Daggers.*

16. *Fix them in the Muzzels of your Musquets.*

17. *Poise your Musquets.*

18. *Charge to the Front.*
19. *To the Right, Charge, (four times.)*
20. *To the Right about, Charge.*
21. *To the Left about, Charge.*
22. *To the Left, Charge (four times.)*
23. *To the Left about, Charge.*
24. *To the right about; Charge.*
25. *Recover your Arms.*
26. *Rest upon your Musquets.*
27. *Handle your Daggers.*
28. *Withdraw your Daggers.*
29. *Place your Daggers.*
30. *Poise your Musquets.*
31. *Rest your Musquets.*
32. *Clean your Pans.*
33. *Open your Cartridge-Box.*
34. *Handle your Primer.*
35. *Sink and Prime.*
36. *Return your Primer.*
37. *Shut your Pan with your Fore-fingers.*
38. *Blow off your loose Corns; At which time you must recover your Arms.*
39. *Cast about to Charge.*
40. *Handle your Cartridge.*
41. *Take out your Cartridge; which done, you must presently shut the Box.*
42. *Open them with your Teeth.*
43. *Charge*

43. *Charge with Powder and Ball.*

44. *Draw forth your Scowrers.*

45. *Shorten them to an Inch.*

This must be done against your Breast.

46. *Put it into the Muzzle of your Musquet.*

47. *Ram down your Charge.*

48. *Withdraw your Scowrer.*

49. *Shorten it to an Inch, as before.*

50. *Place your Scowrer.*

51. *Poise your Musquets.*

52. *Shoulder your Musquets.*

53. *Poise your Musquets.*

54. *Rest your Musquets.*

55. *Ground your Arms.*

56. *Quit your Arms.*

57. *To the Right-about.*

58. *March clear off your Arms and break.*

Being marched clear off the Arms, they must offer, as if they dispersed; but upon the first beat of Drum, they must swiftly return with a Huzz!, every one drawing (in that Motion, his Sword; then each must stand over his own Arms, to expect further Command, viz.

59. *Return your Swords.*

60. *Handle your Arms.*

61. Rest upon your Arms.
62. Poise your Musquets.
63. Sling your Musquets.
64. To the Right about.
65. March to your Horses.
66. Unlink your Horses.
67. Shorten your Bridles.
68. Put your left Foot in your Stirrup.
69. Mount.
70. Fasten your Links.
71. Unslung and Advance your Musquets.

Though this Exercise is for the most part like the Exercise of the Fire-Lock Musquet, on Foot, whether to know any thing difficult we refer you, yet these are many times obliged to fight on Horse Back, as being appointed, and necessary, for the succour, either of Horse or Foot, as occasion or advantage offers; therefore it will be requisite to speak something of their firing on Horse-Back.

*The Exercise of Dragoons on Horse-back,
as to their Firing, &c.*

TH E Dragoons having advanced their Musquets on their right Thigh must expect the Words of Command, *viz.*

1. *Joyn your left hand to your Musquet.*
2. *Cock and Guard.*
3. *Rest your Musquets on your Bridle hand.*
4. *Present.*
5. *Fire.*
6. *Recover your Arms, with the Cock half bent.*

This being observed, they are in a posture to march, Wheel, or Face, as shall be Commanded, or seen most Expedient.

These Dragoons were at first entertained for swift Marches, passing deep Ways or Waters, to keep equal pace with the Horse, till the Foot at more leasure could come up; but being since found very
neces-

necessary to defend against the shot of the Musqueteers, they have been continued, and are no more than a kind of Musquetiers on Horse-back.

The Exercise of the Horse Grenadeers.

THese, as the Dragoons, often fight on Foot, and therefore, though when they are on Horse-back, they may be exercised as the Horse; yet it is most convenient whenever they March, Wheel, Face, or Halt, that they do not bear up too close, nor do it in thick Files, but between every File leave three foot distance, the easier to dismount, and March clear off their Horses, or Face about as occasion shall require; when in this manner being marched into their Arms, loaden, Hats on, and the word to *Halt* given, the Commanding Officer

ficer having bid Silence, must thus proceed, viz.

1. *Granadiers have a care.*

2. *Sling your Musquets.*

In this doing, have your left hand upon the Sling.

3. *Cape.*

4. *Right and Left hand Men of each Rank, keep Mounted.*

5. *Clear your Foot of the Stirrup.*

In this case they must handle their Musquets, casting them backwards.

6. *Dismount.*

This must be done altogether with a quick Motion.

7. *Make ready your Links.*

8. *Link your Horses to the Left.*

9. *March clear off your Horses.*

This may be done by a third or second Rank, Marching thro' as soon as clear, handling at the same time their Musquets.

10. *Halt.*

11. *Lay your right hands on your Musquets.*

12. *Poise your Musquets, facing to the Right.*

13. *Rest*

13. Rest your Musquets.

14. Cock and Guard.

15. Present.

16. Fire.

17. Recover your Arms.

Here you must have your Musquets half bent.

18. Cast about to the Left.

19. Draw your Daggers.

20. Fix them in your Musquets.

21. Recover your Arms.

22. Charge to the Front.

23. To the Right, Charge (four times.)

24. To the Right-about, Charge.

25. As you were.

26. To the Left, Charge (four times.)

27. To the Left-about.

28. As you were.

29. Recover your Arms.

30. Cast about to the Left: Hold: at this word of Command joyn your right hand to your Daggers.

31. Withdraw your Daggers.

32. Return your Daggers.

33. Poise your Musquets.

34. Clean your Pan.

35. Open your Cartridge Box.

36. Take

36. *Take out your Primer.*

37. *Prime.*

38. *Return your Primer.*

39. *Shut your Pan.*

In doing this, bring your Pieces up quick before you.

40. *Blow off your loose Corns.*

41. *Cast about to Charge.*

42. *Take out your Cartridge, immediately shutting the Boxes.*

43. *Uncape your Cartridge with your teeth.*

44. *Load with Powder and Ball.*

45. *Draw forth your Scowerer.*

46. *Shorten it to an Inch.*

47. *Place it in the Barrel.*

48. *Send home your charge.*

49. *Withdraw your Scowerer.*

50. *Shorten it to a handful.*

51. *Return your Scowerer.*

52. *Poise your Musquet, (Do this before you)*

53. *Shoulder your Musquets.*

Upon this word, seize the Slings with our Left hands.

54. *Sling your Musquets.*

55. *Handle*

55. *Handle your Pouches*; the same with the Foot Granadiers.

56. *Open your Pouches.*

57. *Take forth your Granadoe.*

In doing this, extend your right hand before you.

58. *Shut your Pouches.*

Do this, that it may appear but one Motion, the left hands being held up all at a height.

59. *Uncase your Fuzee.*

In doing this, you must face to the Front, having fallen back with your right Leg, bringing it even with the Left.

60. *Handle your Match.*

61. *Blow your Match.*

62. *The first Rank, Fire your Fuzee.*

63. *Deliver your Granadoe.*

Upon this Delivery, unsling your Musquets.

At this Command, the second Rank must advance through the Right, having their March in Order, ready to blow, and place themselves six Foot before the Rank.

64. *Blow your Match.*

65. *Fire*

65. *Fire your Fuze.*

66. *Deliver your Granadoe.*

Upon this, your Musquet being unslung, you must stand ready Cock'd and Guarded; then the third Rank is to March on the Right, six Foot Front-ward of the second.

67. *Blow your Match:*

68. *Fire your Fuze.*

69. *Deliver your Granadoe.*

This done, unslung, and stand Cock'd and Guarded; and upon this Command, the first, or proper Front must speedily March through at six Foot distance.

70. *First Rank, Fire:*

After this Word, the first Rank must fix their Daggers in the Muzzles of their Musquets, and the second and third must imitate the first successively as the same Words of Command come to their turn.

71. *Recover your Arms.*

72. *Cast about to the Left.*

73. *Withdraw your Daggers.*

74. *Poise your Musquets; doing it to the proper Front.*

75. *Shoulder your Musquets.*

76. *To*

76. *To the Right-about.*

In doing this, take up your first Ground in your March, opening your Ranks.

77. *To your Leader.*

78. *Poise your Musquets.*

79. *Rest upon your Arms.*

80. *Lay down your Arms.*

81. *To the Right about.*

March.

In Marching, the Ranks must be broken in manner of dispersing, then upon beat of Drum, you must draw your Swords, Face about, Recover your Order, and return to your Arms with a Huzza.

83. *Return your Swords.*

84. *Handle your Arms.*

85. *Recover, and Poise.*

86. *Shoulder your Musquets.*

87. *Poise your Musquets.*

88. *Face to the Right about.*

89. *Sling your Musquets.*

90. *March your Horses.*

In this last Performance, the second and third Ranks must March, and stand-
Front.

ing at their Horses heads, Face to the Front.

91. *Unlink your Horses.*

92. *Fasten your Links.*

When this is done, you must shorten your Bridles.

93. *Put your Feet in the Stirrups.*

Here you must lay your Musquets over your Saddles.

94. *Mount your Horses.*

This must be done altogether, as if it were but one Motion, and the Officers, whose Business it is, are to see the Ranks compleated and in good Order.

95. *Handle your Swords.*

96. *Draw your Swords.*

97. *Place your Swords.*

Here you must put your Sword into your Bridle-hand.

98. *Handle your Pistol,* which must be ever the Left.

99. *Draw your Pistol.*

100. *Cock your Pistol.*

Here you must keep the Cock guarded with your Thumb.

101. *Present.*

In this doing, bear up your hand even with the Cock.

102. *Fire*

102. *Fire.*

Here you must observe not to take down your Pistol, till the next Word of Command, which is,

103. *Return your Pistol,* and the same Order must be observed upon drawing the right Pistol, till you return it, &c.

104. *Handle your Musquets.*

105. *Unsling your Musquets.*

106. *Mount your Musquets.*

If you are to Charge on Horse-back with the Musquet, which is not done but upon great occasion, the Piece being Charged, the Words of Command are, *viz.*

1. *Cock your Musquets.*

2. *Present your Musquets.*

3. *Fire.*

In this doing, you must keep your Musquet in its posture, till the next word of Command, *viz.*

4. *Sling your Musquets.*

5. *Handle your Swords.*

Do it by taking your Swords in your right hands.

6. *March.*

In Marching, the Officers Commanding, may bring them to any moving posture, as Wheeling, Facing, &c. by giving his Words of Command with such deliberation, that those who are more peculiar to take Notice, may see each Individual Party perform his Exercise, and that they manage their Horses as they ought.

These Instructions put in practice, may greatly forward the young Souldier; though, indeed, a heedful practice is the Life of Exercise.

The Exercise of the Light Horse.

THough, as to the Words of Command in Exercise, they are not many, yet various are the Actions to be performed by them, as after we have given an Account of the known Words of Command shall be shew'd at large, and in this case, when a Squadron or Troop is appointed to Exercise, having their Carbines, and Pistols Loaden; the Corporals

porals must pass through the Ranks, and see that they are all ready; which done, the Chief Officer commands Silence, and gives the Words, *viz.*

Lay your right hands on your Swords.

Draw your Swords.

Put your Swords in your Bridle-hands.

Lay your hands on your Pistols.

Cock your Pistols.

Hold up your Hands.

Fire.

When you have given Fire, you must not let your Pistol hand fall, till the next Word of Command be given, *viz.*

Return your Pistols.

And this you must observe, in Firing the right and left again.

Lay your hands on your Carbines.

Advance your Carbines.

Cock your Carbines.

Fire.

Let fall your Carbines.

Take your Swords from your Bridle hands.

Return your Swords.

These motions must be exactly observed, every Man doing each particular

Mo-

Motion at one and the same time; the Word of Command for that purpose being given deliberately that there may be no mistake.

In drawing up a Body of Horse, that is, when the Body is drawn up, the Officers that Command not in Chief, ought to keep close to their Men; but the chief Commandent must be about a Horse's length before them, to see more exactly what is done; and so it must be observed in Marching.

It is further to be noted at this day, that when a Squadron of Horse is to Wheel; if to the Right, the right-hand Men must not close to the Left, as formerly, for that puts the Ranks out of Order, but they must keep their Ground, suffering the left to come about, whilst they only turn their Horses Heads, observing their left hand Men.

This may serve for the Motions, which the Officers are to take care of, yet there remains many other curious Matters, to which we proceed.

To close the Files.

1. If you would be at close Files. To close your Files.

The Right wing File stand.

Close your Files.

To the Right.

To the Left.

As you were.

To the left wing, and stand.

To the left, by Files, close the Squadron.

To the Right.

As you were.

*The right and left wing Files stand,
By half Ranks.*

Close Files to the right and left ; or by closing Files, you may cleave the Squadron.

The manner of Closing the Ranks.

File Leaders stand.

By Ranks, close the Squadron to the Front.

On

On the Front, as you were; or open to the Ranks on the Front to the first distances.

The manner of Doubling Ranks.

By half Files.

To the Right.

Double your Ranks to the Front.

File-Leaders, Advance your Ranks.

Half Files, take your Ground.

In this manner you may Command to the Left.

The first half Files stand.

By half File.

Leaders on the left wing, double your Ranks to the Front.

Now, if you would reduce this again, observe the following Command, viz.

Right wing half Rank, Advance your Ranks.

Half File-Leader, take your Ground.

The first half File stand.

By half File-Leaders on the right and left wings; then double your Ranks to the Front, Carocoling to the right and left; then the last half File stand, and the first half File by Carocol to the right and left on the

Wings; after this double your Ranks to the Rear.

Here the first half File must observe to open the half Rank to the Right and Left. The first half File by *Carocol*. *To the Right and Left, double your Ranks to the Rear.*

In this case, let the last half File open the half Rank to the Right and Left; and since these Words *Carocol* and *Conversion* may appear difficult to understand, it will be convenient to explain the Motion.

When you are to Wheel by *Carocol*, observe that it is made by the depth or flank of the Squadron, by which means the Rank, and not the File makes the Motion.

Conversion in Wheeling is performed by the Front of the Squadron, by which means the file remains, whilst the Rank makes the Motion.

Plate I

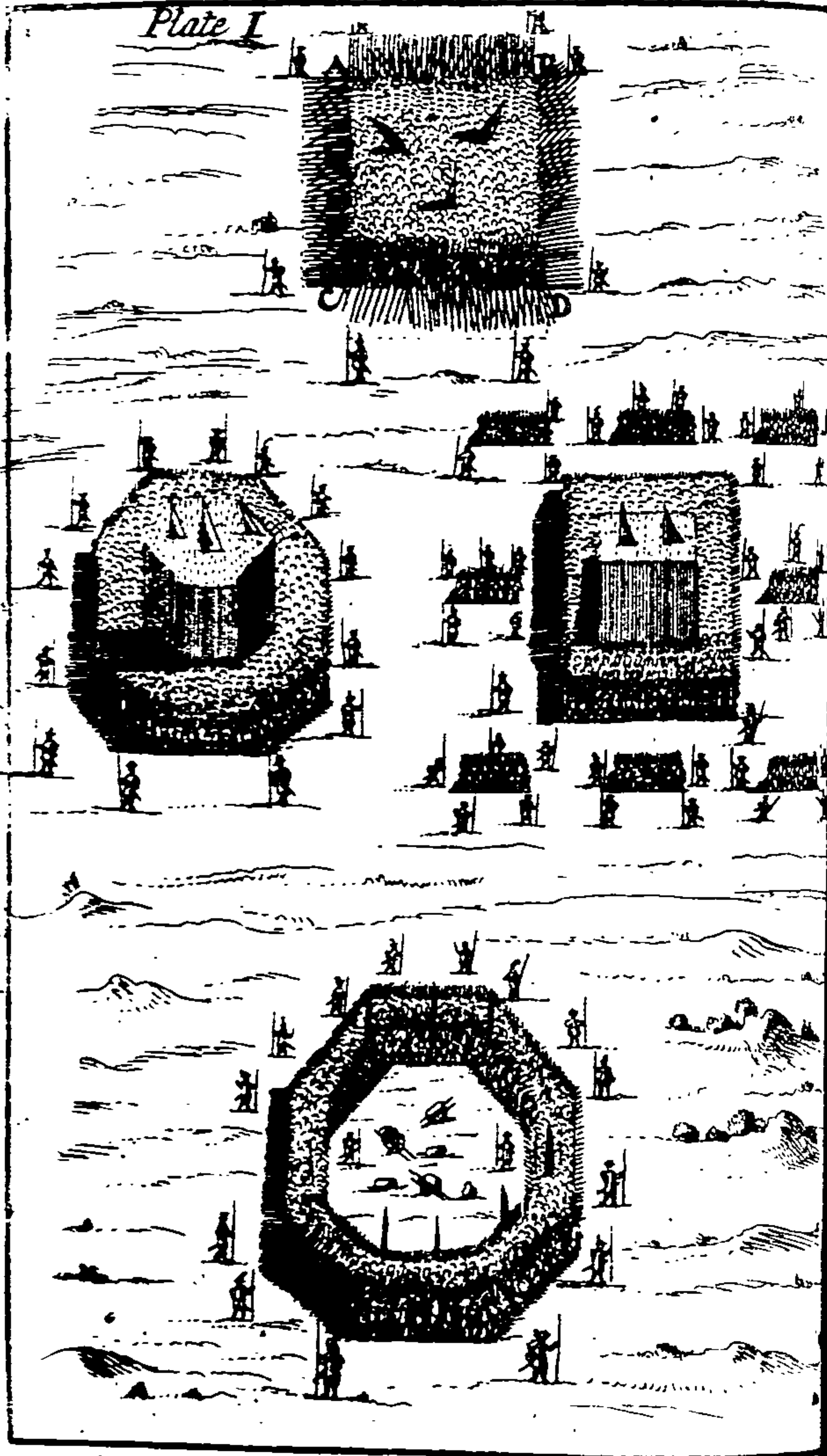


PLATE I.

The Method of forming Battalions of Foot.

THIS Excellent Art of forming the Foot, instructs how to draw up a Body of men in such excellent order, and with so much precaution before hand, that they may be able to withstand and engage another Body of Infantry, though of a far greater number; or a Body of Cavalry alone, or else a Body compos'd both of Cavalry and Infantry, when attacked in a Plain, down, or in an open Field, where there are neither Defiles, as Hedges nor Ditches, nor any rising Grounds to defend them from the Enemy. Now the Pike and Partizan, being the only Arms proper to stop the fury of the Cavalry, and to prevent their breaking in upon the Battalion, the first thing that is to be done in drawing up this Battalion, must be to form a Body of

all Pikes, and it must be the chief care of the Officer that commands the Party, to dispose his Men in such a form, that they may be able not only to defend the Miqueeters, but the Colours also, and the Baggage, if there should be occasion.

Now in ordering a Battalion in this manner, the three following Rules are to be observed.

1. The Men must be so ordered, as to stand with their Arms presented every way, and to make a Front on every side, to the end, that whatever of their Fronts be assailed, or attacked, they may be able to defend themselves.

2. The Soldiers must be so ordered, that the Angles of the Battalion may be very obtuse; in such a manner, that the two sides that form the Angle joyn together, but with one right Line only. For the Angle is the weakest part of the Battalion, as being least strengthened by the Pikes. For the Soldiers which are next the Angle, present their Pikes in Front, and not being able therefore to present, lie open to the Enemy. So that our Fore-Fathers, with whom Square
Batta-

Battalions were in great use, flanked their Angels with little Bodies of Musqueteers marked A B C D, which are small Bodies posted in the middle of the Fronts of the Battalion, and with which sometimes they secur'd the Angles. True it is, that these little Bodies being easily cut off by the Horse, and beaten off from the Body of the Battalion, the farther use of them has been laid aside.

3. You ought to leave void a space of Ground in the Center of the Battalion, or middle of the Pikes, sufficient to receive and secure the Musqueteers the Colours, and Baggage.

The manner of ordering any number of Soldiers into any Square Form of Battel.

1. These are to be considered either in respect of the Form of the Ground, or of the Number of the Men.

A Square Battel of Ground is that which hath the Rank as long as the File, notwithstanding the Men in Rank be more than in File.

A Square Battle of Men, is that which
hath

both an equal number of Men both in Rank and File, though the Ground on which they stand be longer on the File, than on the Rank.

2. In respect of the number of the Men, it is called either a *Square Battel*, or a *Double Battel*, or a *Battel of the Grand Front*, which is Quadruple, or a Battle of any proportion of the number in Rank to the number in File.

3. So that if you are to form a Square Battle of Men, extract the Square Root out of the whole number of Men, and the same shall be the number of Soldiers to be set in a Rank. As for Example, 576 are to be formed into a Square Battel, that there may be as many in Rank as in the File. Take the Square Root of 576, which is 24, the Number that are to be in a Rank, and also in a File.

To order any number of Men into a Battel of the Grand Front.

Suppose 16900 Soldiers were to be Marshall'd into a Battel of the Grand Front. First divide 16900 by 4, which gives

gives me $\overline{42243}$; out of which I extract the Square Root, which is 65, the Quadruple whereof is 260, so that I have 6 for a File, and 260 in Rank.

Any number of Men, with their distance in Rank and File, how to order them into a Square Battel of Ground.

Suppose 2500 Soldiers, were to be drawn into a Square Battle of Ground, so that their distance in File should be 7 Feet, and in Rank 3 Feet; how many must be placed in Rank and in File.

Say by the Rule of Three, as 7 to 3, so is 2500 to 1071, the Square Root whereof is 32, which is the number of Men in a File, and 3 over. How to find the number of Men that are to be in Rank; divide 2500 by 32, the Quotient is 78. which is the number of Men to be placed in a Rank, and 4 over.

*The manner how to order the Square in
time of Battel.*

TH E Square being formed as afore-
said, the Officers are to take care, that
every Front of Soldiers do their Duty, and
the Captains that are in the Center of each
Front, are to retire into the first Rank,
when the Musqueteers make ready, and
are to kneel when the Soldiers kneel, and
to perform the same with their Pikes as
the Pikemen do: Then Command;
Granadiers take your Posts to the Angle.

Here your *Granadiers* are to be divided
in 4 equal parts, and are to be placed
without at the 4 Angles, but if there be
not room enough, you may place some
of them within the Angles with their
Daggers in their Firelocks: those with-
out the Angles are to be 3 deep. The 2
last Ranks of which are to fire with the
Musqueteers. And the Front Rank are
to make ready their Granadoes. And as
soon as the two last Ranks have fired,
they

they are to put their Daggers into their Firelocks, and stand Charged; and when the first Rank of Musqueteers present, the first Rank of Granadiers are to deliver their Granado's; which done, they are to unsling their Firelocks, and put in their Daggers, and stand Charged as the rest.

2. *Face square.* Here the Musqueteers on the Right and Left are to face outwards, and those to the Rear, to face to the right about. The 3 outwardmost File of Pikes on the right and left, are to face outwards, and the Rear half Files of the rest of the Pikes are to face to the Right about. Those in the Angles are to face to the points of the Angles.

3. *Musqueteers make Ready.* Here the Pikes are to Port very low, and to continue so, and not to Charge when the Musqueteers Present.

4. *First Rank Kneel.* Which they must do, holding their Musquets, so that the two last Ranks may fire over them.

5. *The two last Ranks Present. Fire.* As soon as ever the second and third Rank have Fired and Recovered their
Arms

Arms; the first Rank is to stand up without any other Word of Command, with their Musquets Cocked and Guarded, ready to Present.

6. *Recover your Arms.* Here the first Rank stands up with their Musquets recovered strait before them, ready Cocked and Guarded, and the two Ranks that have fired load.

7. *Front Rank Present.*

8. *Fire.*

Recover your Arms. At which Word of Command, the Pikemen are to recover their Pikes from their Port. *To, your Leader, March, Halt, Face, Square, &c.*

According to this Method, they may be made to March and to Fire to every Front.

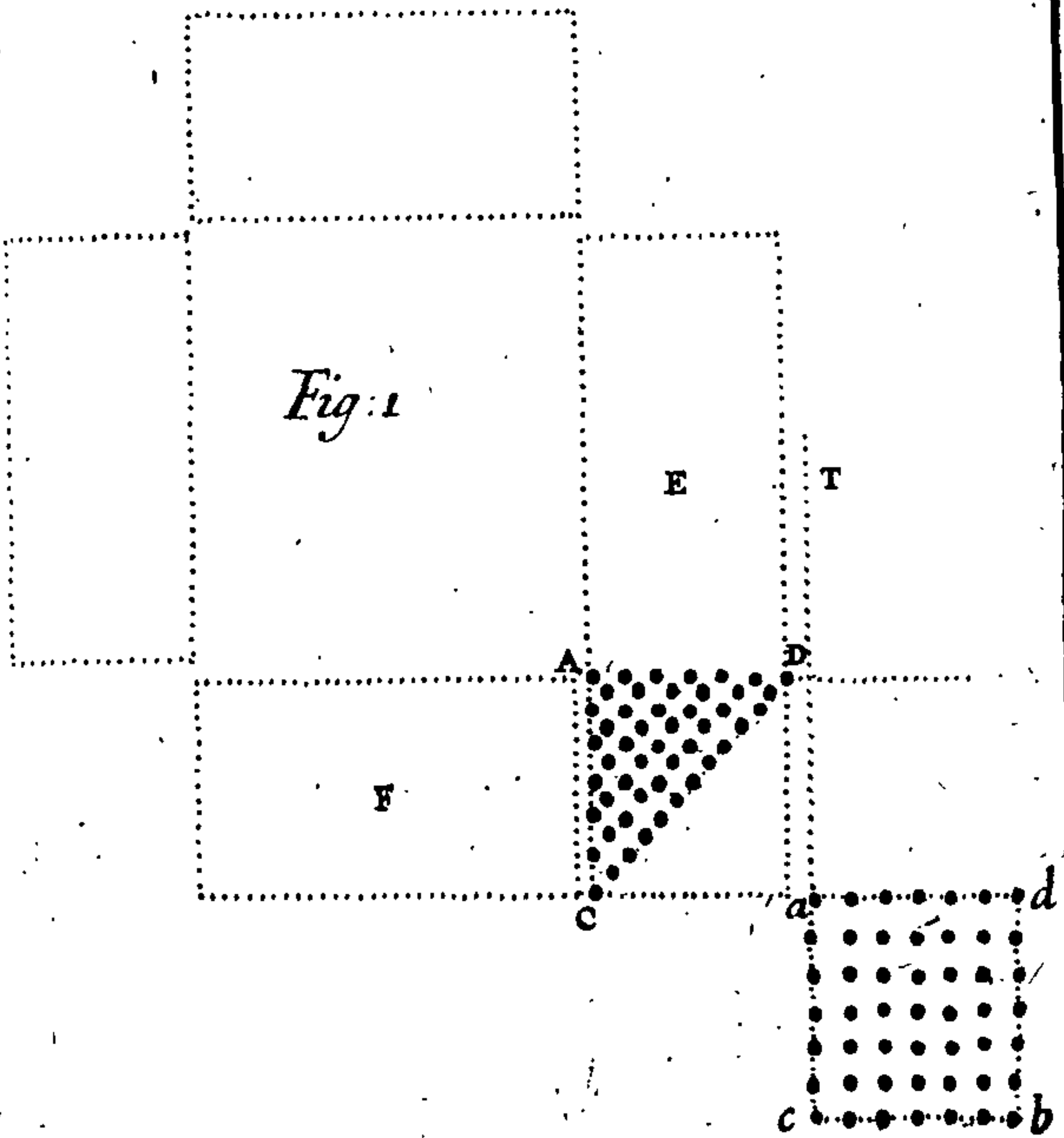
PLATE II.

The General Rule for the blunting or filing up the Angles of the Battalion.

EVERY Body, whether lesser or greater, that requires the blunting of
of

Plate II

Fig: 1



of its Angles, ought to be compos'd of a Square number of Men, as of 4, 9, 16, 25, 36, 49, &c. Therefore you must place the Men in Rank according to the Arithmetical Progression, or Proportion, of which the Interval, Excess or Difference of the Terms must always be two: Thus, having placed the first Man at the Angular Point A of the Figure 1. the second Rank shall be of three Men, as being a number of which, the Excess, Interval, and Difference is two in respect of one. The third Rank shall be of five Men, which is a number that exceeds three by two, the fourth shall be of seven, the fifth of nine, and so forward, still encreasing every Rank by two Men, more than the Rank which is before, according to the same Arithmetical Progression, which has always two for the Interval, and difference of the Terms.

Now to place these Men in due Order, you must imagine that the Square little Body A C B D; moves off the Ground T, upon the left of the Battalion Q; and when its last Rank A D, is advanced one
 Pace

Pace beyond the Wing A D of the same Battalion Q, it turns to the right, and then the Soldier A of the Second Figure comes upon the Ground A of the first Figure. The sides A D, A C, of the small Body meet together upon the sides that answer one another, A D, A C of the Angle. Then you Command the Men of the little Battalion to make a Front toward the Angle, and when they are drawn up according to this Arithmetical Progression, you cause them to make an outward Front.

PLATE III.

The manner of forming an Octagon on Battalion with Eight Fronts.

SUPPOSE it a Battalion of 40 Pikemen, drawn up four deep, and 10
in

Fig: III

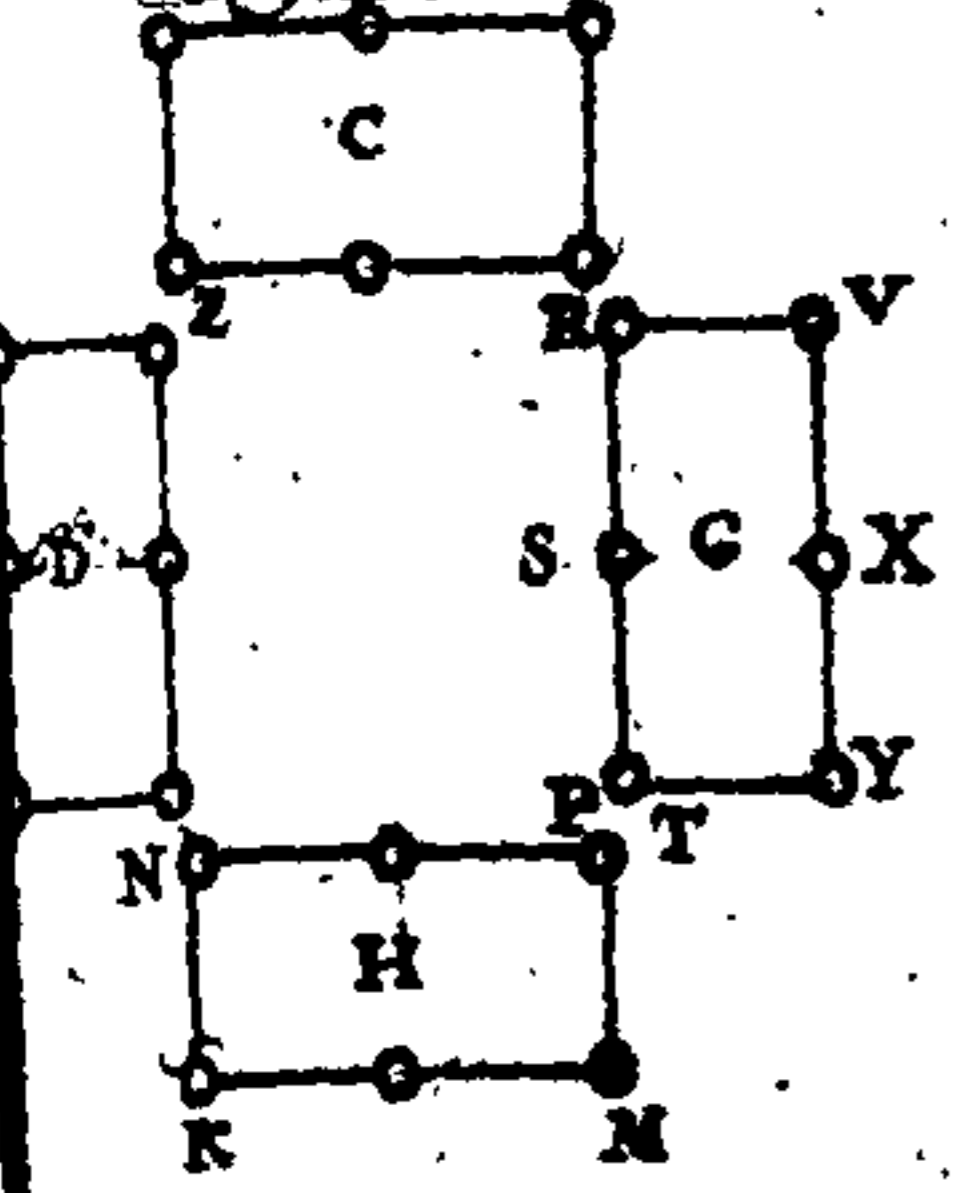
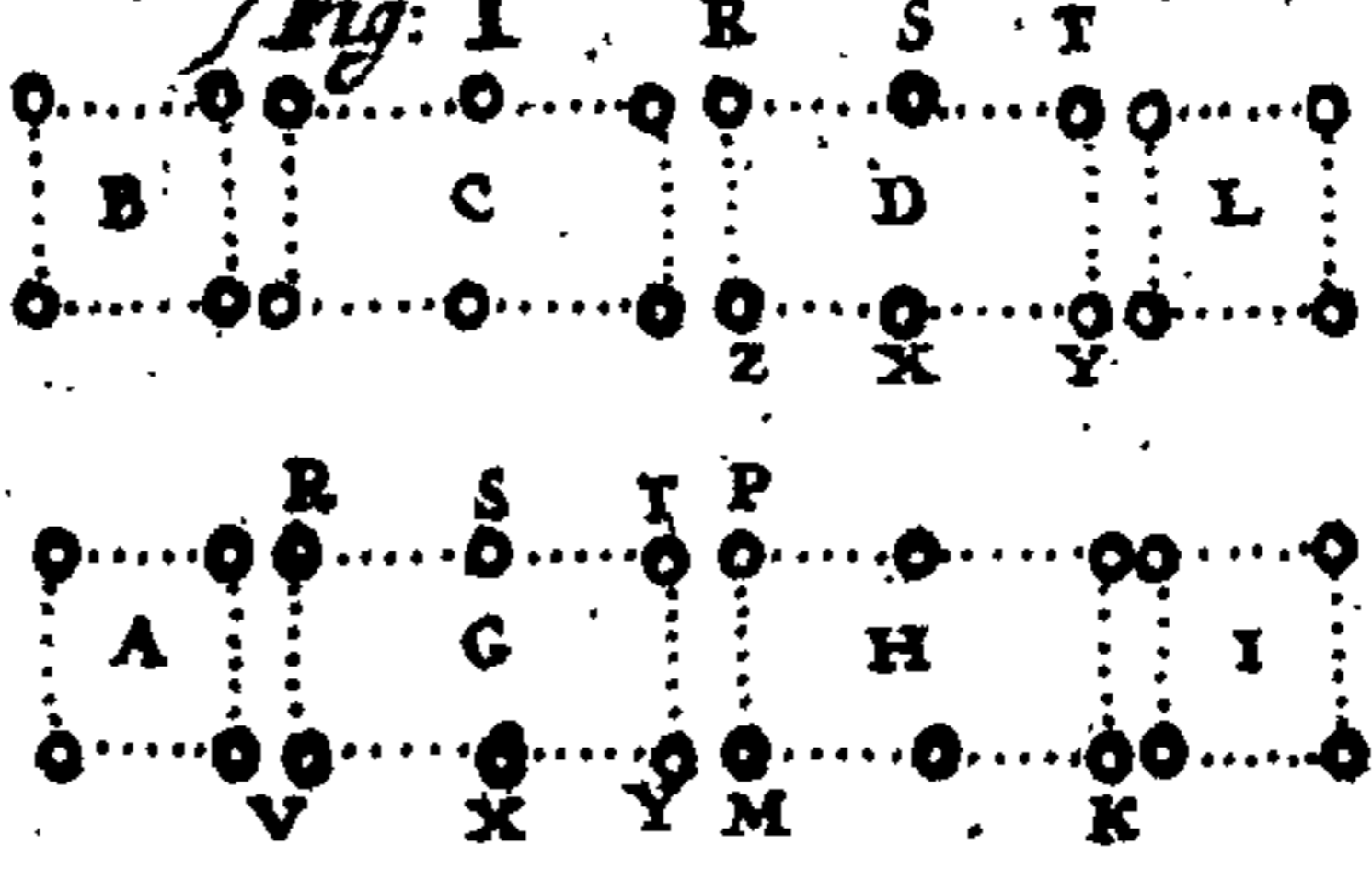


Fig: I



7

8

Fig: IV

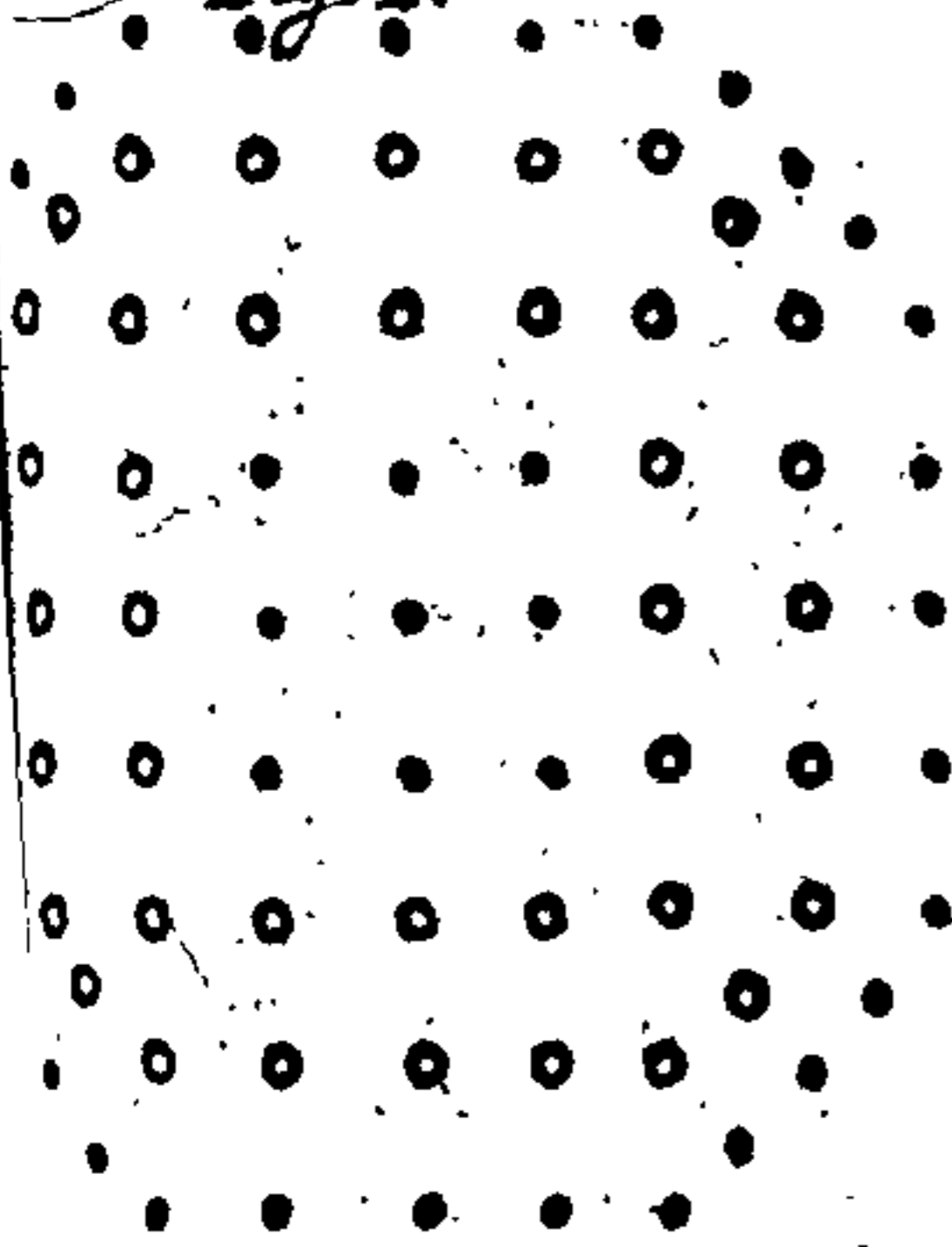
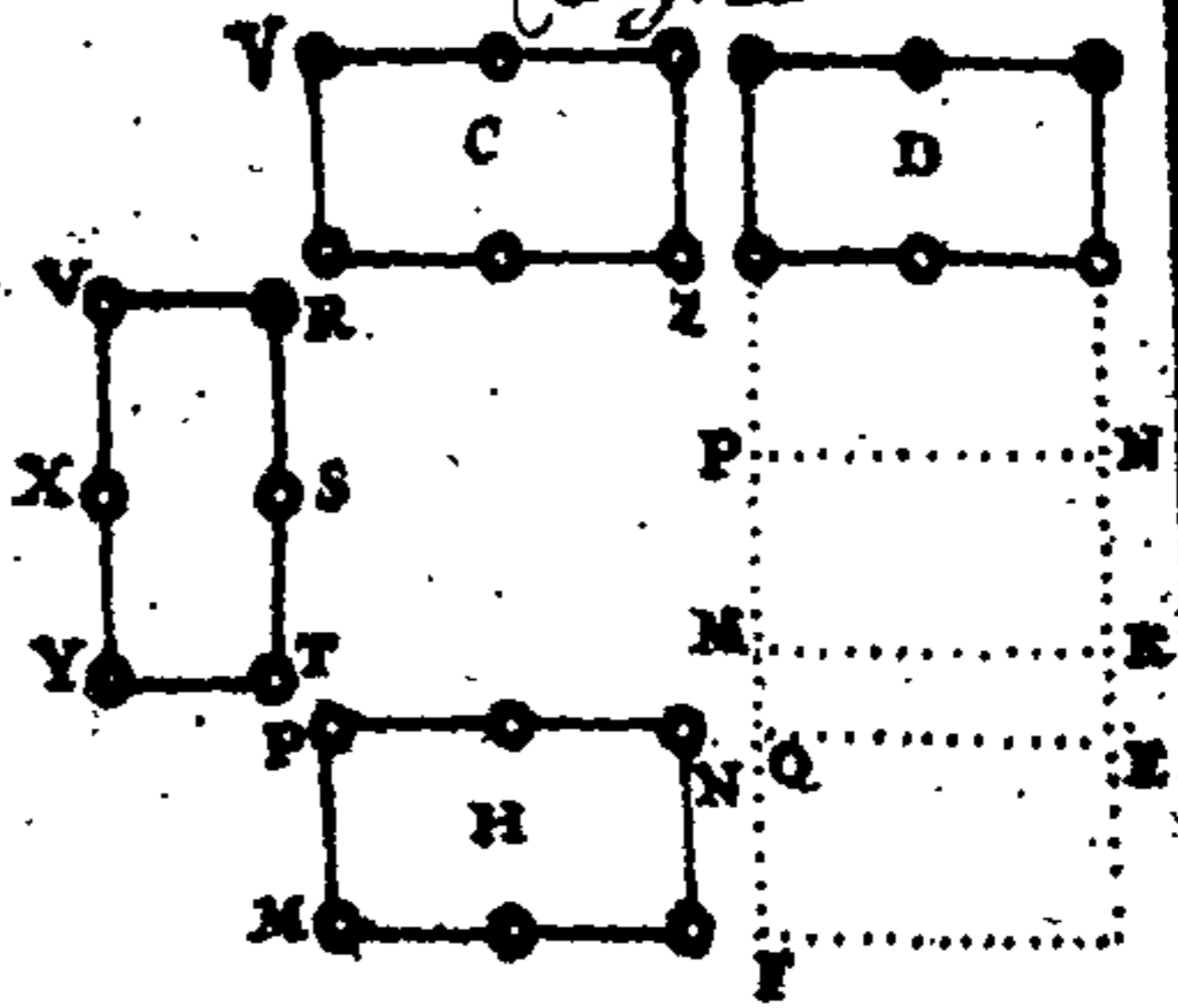


Fig: II



in Front. You may, according to the same Method, draw up like an Octogon, any number of Pikemen that shall observe the same Proportion of 4 to 10, between Front and Depth, as 8 in Depth, and 20 in front, 16. in depth, and 40 in front, or 32 in Depth, and 80 in front. For in his Example I have chosen this little number of Pikemen, to give the more light to the ordering and disposing of a far greater number.

The Words of Command.

1. *The two right hand Files, and the two left hand Files stand fast. A B, I L.*
2. *The half File of the two right hand Files, face to the right, B.*
3. *The half File of the two left hand Files, face to the left L.*
4. *Files of the wings, March.*

The half file B moves into the ground 4, L moves into 5, A moves into 7, and I into 8; which four Bodies are designed to blunt the Angles.

There remains afterwards upon the ground of the Battalion, the six files

G

C D,

C D, G H, which must be opened by half Ranks, and half Files, to form the Cross of the third figure, and to clear the ground of the Center, by a quarter Wheeling.

5. The half File of the right hand half Rank C, half turn to the Right. Order your Pikes.

C makes a front towards the Rear, and keeps his ground.

6. File-leader of the right hand half Rank to the right, G. March. Stand.

The three files **G**, makes a front toward **A**, upon the right Wing, and advance on that side, two or three Paces beyond their Ground; and so that which was a File is become a Rank.

They that marched stand fast, G to the Right, a Quarter wheeling.

The three files **G**, make a quarter turn to the right, and wheel about the Soldier **R**, in like manner as the right Wing **T Y** of the first and became placed, as you see the 2d figure; where the three files **C**, are marked with the same Letters as they are in the Body of the first Figure.

And

And because, that after the Wheeling, they make a Front toward V R, to the end they may make the Front outward on the side of V X Y. (The next Word of Command is :)

8. *To the left.*——*Order your Pikes.*

9. *File-leader of the left hand half Rank, stand upon your Guard, H. March.*

Take notice in the 2d Figure of the three files H, marked with little Points, These you cause to march forward along the Line marked P M, Q F, to gain the ground H, marked with three great Dots in the same figure. But to gain this ground, they march beyond the ground of the Battalion, till the second Rank pointed P N, have advanced three Paces farther than the flank Y T, of the three files G, which then make a Wheeling, which will happen when the Soldier P, shall be upon the ground Q, and that the Soldier M, shall come upon the ground F, then the Word of Command,

10. *To the Right.*——*March.*

To make a front toward the three files G, and when they shall come to be three Paces from the Rear of the three Files G, then Command them,

11. *To the Left. Rest your Pikes.*

Then they will make a front outward, and so shall keep their ground.

12. *To the Right.---A Quarter wheeling,*

The half file D, makes a quarter Wheel about the Soldier Z, and because that after the Wheeling, they make a front inward toward the Center, therefore to change the Front outward, the Word of Command is :

14. *They that made the Quarter wheeling, wheel by half Conversion to the right.*

The Crois being thus made, you bring the four files upon the Ground, 4 5, 7, 8, and blunt the Angles according to the foregoing General Rule.

PLATE IV.

The manner of drawing up a Battalion in a Hexagonal Figure, with a void Space in the Center, and the Front of the Battalion five times exceeding the Depth.

WE suppose the Battalion to consist of 720 Pikemen, 12 Deep, and
60 in

Scale for the third and fourth Tables Fig. 1

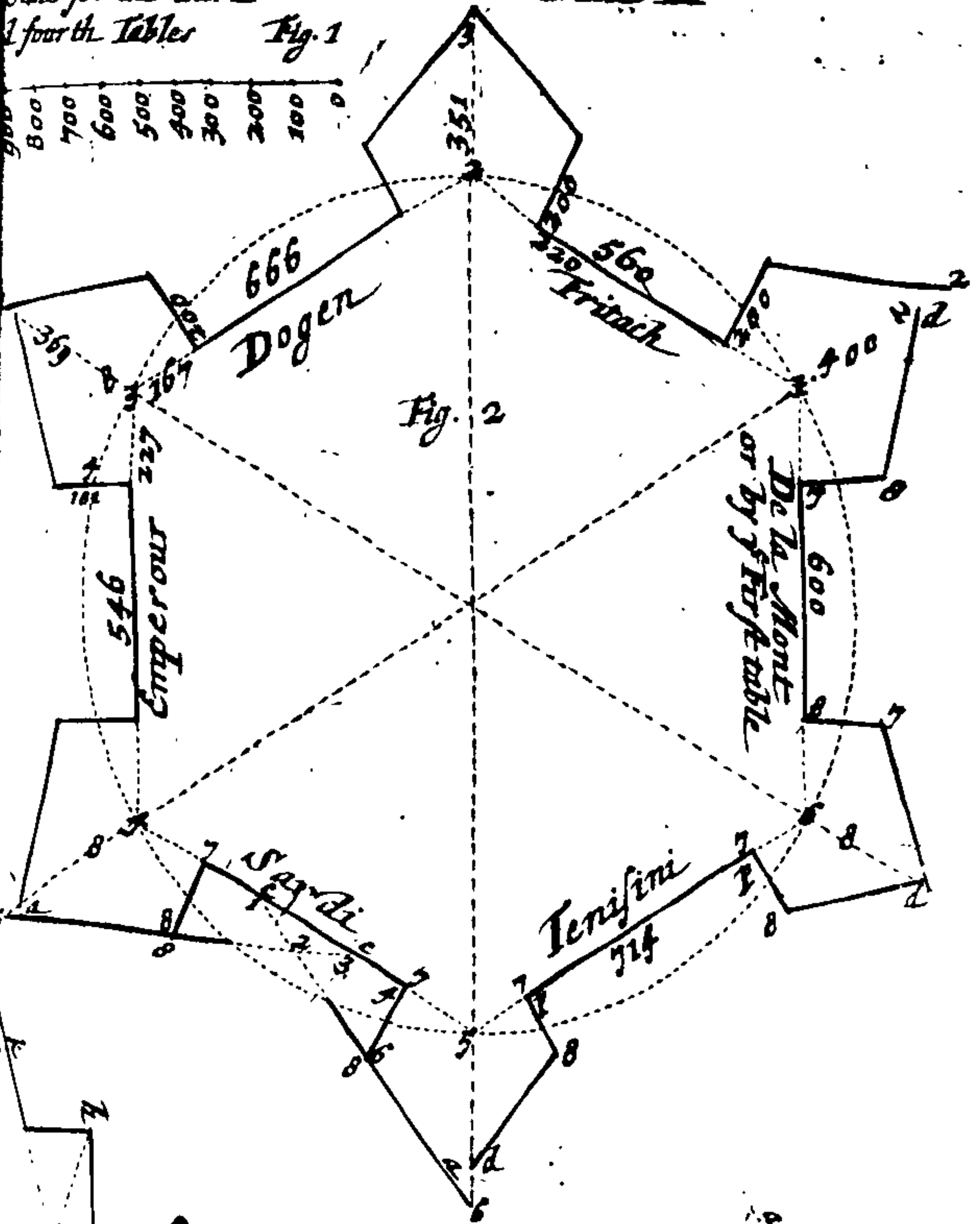
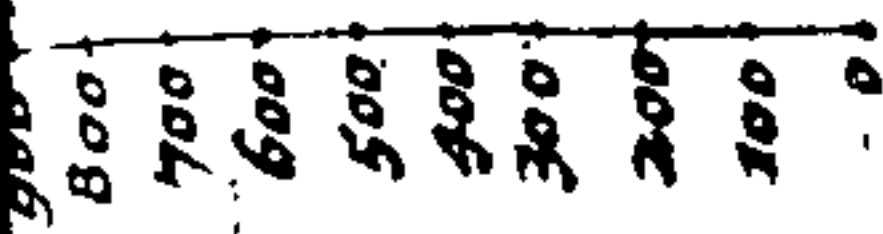


Fig. 2

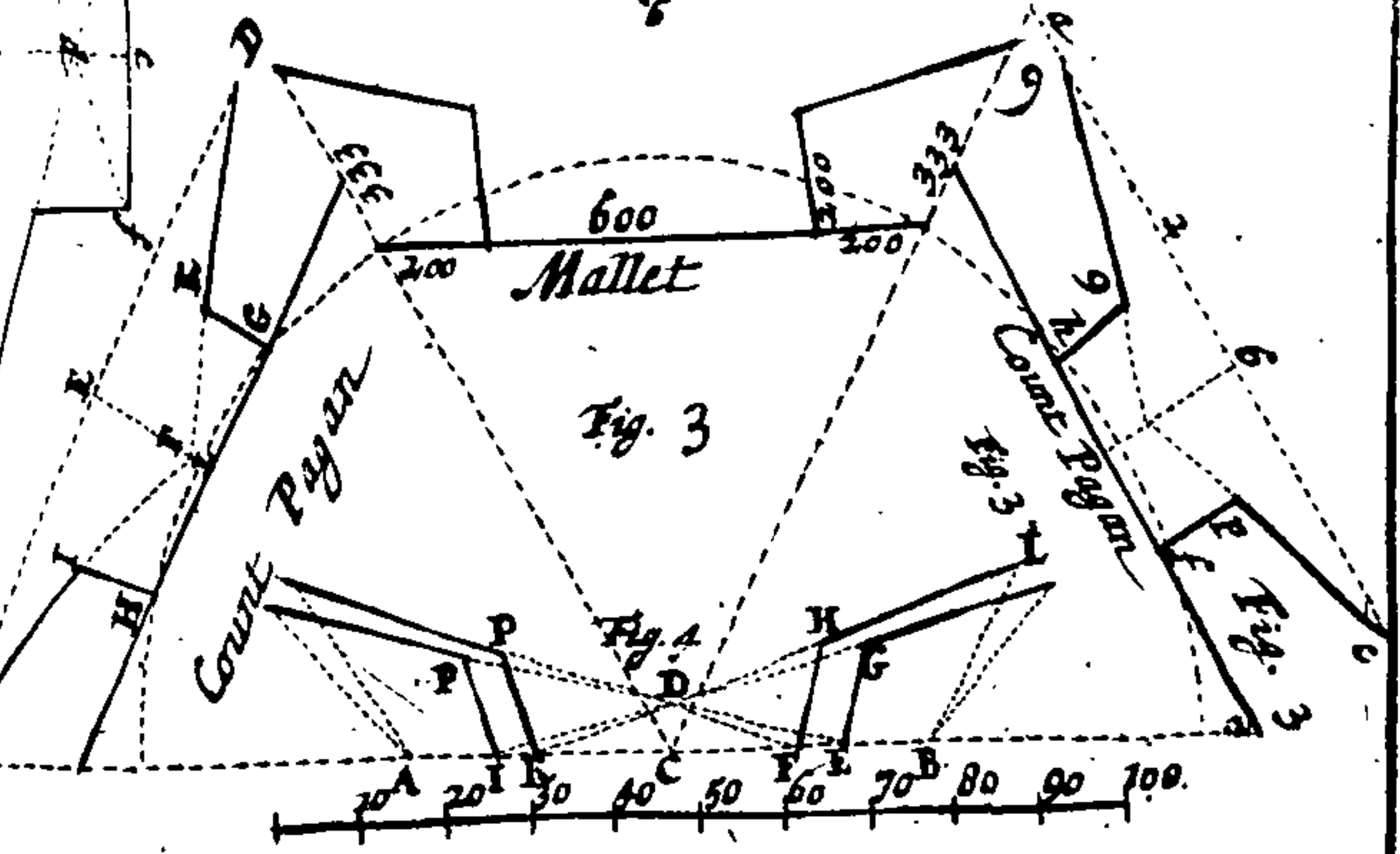


Fig. 3

Scale for the first and second Tables

60 in Front, which is to be drawn up into an Octogonal Figure like that marked.

The Battalion being drawn up in the large black Draught of the first figure to bring it to the Square marked with Points in the same figure, the following Words of Command are to be made use of.

1. *The twelve Files of the Right wing, and the twelve Files of the left wing, stand fast. C. D. Q. P. A. B.*

2. *The six Right-hand files of the Right-wing, and the six left hand files of the Left-wing, C. D. A. B.*

3. *They that have advanced double their Files inward to the Front and Rear.*

A, Takes the Ground V. B. takes the Ground T. C. takes the Ground G O, and D. possesses R.

4. *They that had the Word of Command, and they that have doubled, stand fast, V P T, O Q R.*

5. *Middle files stand fast M B.*

6. *Advance your Pikes, Middle Files E M.*

7. *The half File of those that advanced
G 3 their*

their Pikes, wheel by half Conversion to the Right M.

8. *March those that advanced their Pikes, till the first Rank be advanced one Pace further than the first of the Files that doubled Front and Reer.*

M and E move and change into the Ground marked with the points M and E, and form the square represented by the same Points, which is afterwards to be considered in the figure K.

9. *The six right hand Files and the six left hand Files that marched wheel, by half Conversion, into I F, H H, which done, Face towards the Center of the Battalion.*

10. *They that have wheeled by half Conversion to the Right, march toward the Center till the last Rank be all entred.*

I and F come upon the Ground Y, and H H upon the Ground G G where as they stand, they are caused to turn to the Right and Left, to advance forward, that is, Y fronting Y, and G fronting G, by which means Y Y. G G. possess the Ground of N N N N.

The Ground I Y. and F Y becomes void.

Then

Then the word of Command is to be given to the two particular Battalions, O Q R, V P T, which in regard they make a Front inward, you must order the Battalion O Q R, to make a half wheel to the Right, and the Battalion V P T, to make a half wheeling to the left, and by that means they will make a front inwards, and you shall cause them to march to the Center, and the O and V shall possess the ground Y, Y, and R and T shall possess the ground G G.

Then you must cut off eight fourths of the Ranks O R V T L L L L, and reduce them into Triangles, to blunt the four Angles that are next them, and the Battalion shall be formed after an Octagonal figure, as in the figure marked ♂, where you see the same Letter made use of here, they answer to the same letters in the two other figures.

You have 532 Musqueteers at 12 in depth, and 44 in front, there will remain 4. The 532 Musqueteers shall serve for the Flanks of the Battalion of Pikes, and to that purpose you shall take 12 files of the right Wing, which will make 144 Musqueteers, and as they will

be equal in front to the Body of Pikes marked E, you shall march them to the head of the said Body, and cause them to enter into the Center thro' the Intervals of the Pikes.

When they are advanced towards the Center, divide the Ranks into half, so that one half Rank shall march towards the Body of Pikes marked Q, and the other half Ranks towards the Body of Pikes marked P.

After this take from the left Wing of the Musqueteers 12 files more, which make 144 men; and cause them to advance towards the Center thro' the Intervals of the Pikes E, and then divide them by half files.

One half file shall advance toward M, and the other half file shall stand their ground behind the Pikes E.

For the 304 Musqueteers that remain, they shall make the two files that surround the whole Body.

Plate V:

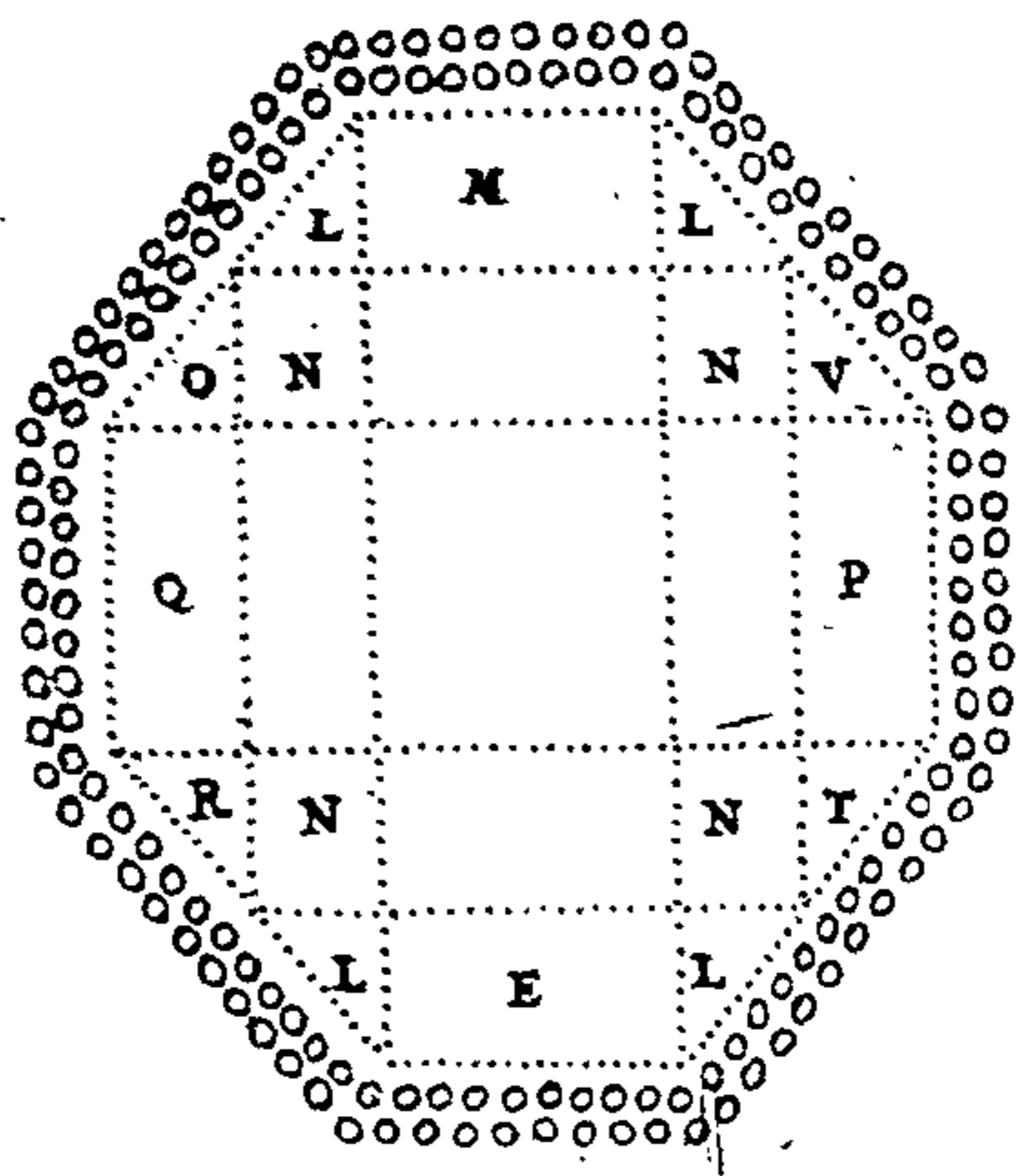


Fig 1.

