

TIME AND SPACE.

In moving to a starting point it may be taken that all troops march at the rate of 100 yards a minute.

Rate of movement in the field are approximately as follows:—

Arm.	Yards per minute.	Minutes required to traverse 1 mile.	Miles per hour.
Infantry—			
Usual pace ..	98	18	3
Mounted Troops—			
Walk	117	15	3½
Trot	235	8	7
Gallop	440	—	—
Trot and walk ..	—	—	5

The Length of a Pace—

In slow and quick time is ..	30 inches
„ double time	40 ”
„ stepping out	33 ”
„ stepping short	21 ”
„ side step	15 ”

The spaces required for the various arms in column of route are:—

Headquarters of units, 2 yards per riding horse.

Mounted troops in section, 1 yard per horse in the ranks.

Mounted troops in half-sections, 2 yards per horse in the ranks.

Infantry in fours, ½ yard per man.

The following distances are left between units:—

In rear of an Infantry Company ..	10 yards
„ a Squadron, battery or other unit not specified ..	10 ”
„ Cavalry regiment, Brigade D.A. or Infantry battalion ..	20 ”
„ Cavalry or Infantry brigade..	30 ”
„ a Division.. according to circumstances	

USEFUL HINTS AND INFORMATION.

To find approximate true north with a watch.—In the northern hemisphere, hold the watch face upwards, point the hour hand at the sun, and bisect the angle between the hour hand and twelve o'clock. The line so found will point to the south.

In the southern hemisphere, point the line from the centre of the dial to twelve o'clock at the sun, and bisect the angle between this and the hour hand. The line so found will point to the north.

To calculate the approximate bearings of a point from a watch.—The circular face of a watch is equal to 360 degrees, being divided into 12 hours each hour equals 30 degrees. As the distance between each hour on the dial is divided into 5 minutes, each minute, therefore, shows 6 degrees.

To find the scale of any map having a representative fraction (R.F.)—Divide the denominator of the R.F. by 63,360, this gives the number of miles to the inch; thus if R.F. is

$$\frac{1}{80,000} \text{ then } \frac{80,000}{63,360} = 1.263 \text{ miles to the inch.}$$

To find the number of inches to the mile, divide 63,360 by the denominator of the R.F.: thus if the R.F. is

$$\frac{1}{80,000} \text{ then } \frac{63,360}{80,000} = .792 \text{ inch to the mile.}$$

Magnetic Variation.

London	15 deg. W.
Paris	13½ ” W.
Berlin	8 ” W.
Brussels	13 ” W.
Cairo	10 ” W.
Wellington	16½ ” E.