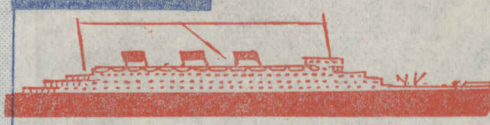
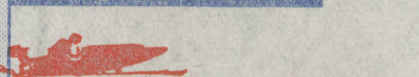


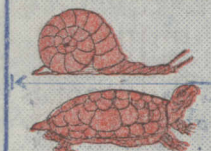
## SPEED FIGURED IN MILES PER HOUR

BICYCLE  
38 M. P. H.UNION PACIFIC STREAMLINE TRAIN  
OCT. 24, 1934. 120 M. P. H.PENNSYLVANIA SPECIAL  
JUNE 12, 1905. 127.2 M. P. H.EXPERIMENTAL STREAMLINE COACH  
GERMANY, 1931. 143.75 M. P. H.

MOTORCYCLE 151 M. P. H.

C. W. A. SCOTT AND CAMPBELL BLACK  
176.5 M. P. H.  
(AVERAGE SPEED IN LONDON TO MELBOURNE AIR RACE)CAPT. EDDIE RICKENBACKER  
NOV. 8, 1934. 217 M. P. H.  
(AVERAGE SPEED IN TRANSCONTINENTAL RECORD)SIR MALCOLM CAMPBELL—272.46 M. P. H.  
AT DATONA BEACH, FLA., FEB. 22, 1933LT. FRANCESCO AGELLO OF ITALY  
440.29 M. P. H. OCT. 23, 1934CLIPPER SHIP  
24 M. P. H.MODERN BATTLESHIP  
26.5 M. P. H.MODERN LUXURY LINER—28 M. P. H.  
(AVERAGE SPEED IN RECORD OCEAN VOYAGE)MODERN LUXURY LINER  
31 M. P. H. (EXTREME SPEED)U. S. S. LEXINGTON—35.25 M. P. H.  
(AVERAGE SPEED IN RECORD OCEAN VOYAGE)MODERN BATTLE CRUISER  
38 M. P. H.MODERN DESTROYER  
43.5 M. P. H.OUTBOARD MOTORBOAT RECORD  
58.82 M. P. H.GAR WOOD—MISS AMERICA X.  
124.86 M. P. H.IN ALL CASES  
SPEED IS GIVEN  
IN LAND MILES  
RATHER THAN  
NAUTICAL MILES

## DISTANCES TRAVELED IN ONE MINUTE



SNAIL - 2 1/2 INCHES



TORTOISE - 38 FEET 9 INCHES



MAN, WALKING (5 MILES 566 YARDS IN ONE HOUR) - 732 FEET 4 INCHES



CHICKEN, RUNNING - 792 FEET



PIG - 968 FEET



DOG - 1,760 FEET



MAN, RUNNING (100 YARDS IN 9.4 SECONDS) - 1,914 FEET 10 INCHES \*



JACKRABBIT - 2,200 FEET



MAN, SKATING (ONE-EIGHTH MILE IN 18 SECONDS) - 2,555 FEET \*



GREYHOUND (CLOCKED ON 525 YARD COURSE) - 3,080 FEET \*



HORSE (QUARTER-MILE IN 21.25 SECONDS) - 3,727 FEET \*



PRONGHORN ANTELOPE - 3,960 FEET



LION - 6,000 FEET \*



CHEETAH - 6,160 FEET \*

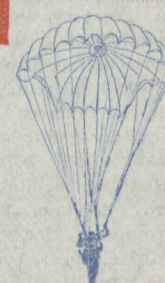
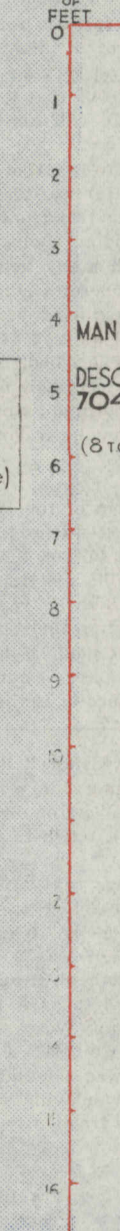
\*NOTE: Solid lines indicate distances to which maximum speeds have been clocked, observed, or estimated.  
Broken lines represent additional distances which would be reached, were maximum speeds maintained to end of one minute period.



JOHNNY WEISSMULLER SWAM AT RATE OF 352.94 FEET A MINUTE (100 YARDS IN 51 SECONDS) \*

DOLPHIN'S ESTIMATED SPEED 3,520 FEET A MINUTE (Figured on a probable rate of 40 miles an hour for a short distance)

SCALE OF THOUSANDS FEET

MAN WITH PARACHUTE OPEN  
DESCENDS AT RATE OF  
704 TO 792 FEET  
A MINUTE  
(8 TO 9 MILES AN HOUR)MAN WITH PARACHUTE  
CLOSED  
FALLS AT RATE OF  
10,384 FEET A MINUTE  
(118 MILES AN HOUR)BOMB DROPPED FROM PLANE  
FALLS AT RATE OF  
16,632 FEET A MINUTE  
(189 MILES AN HOUR)

SCALE OF MILES



By JOHN A. MENAUGH

## This Is the Age of Speed!

**S**PEED is only relative. By the side of the sluggish snail, another proverbial slow-poke, the tortoise, is a marvel of speed. In fable the tortoise beats the hare, but in life as it is lived in swamp and upon prairie the long-leaping jackrabbit travels at an amazing rate compared with the crawling reptile.

Man flashes across the sky in a roaring airplane at more than 400 miles an hour. Astounding, everyone admits. Yet how slow indeed is the aviator's progress beside that of the earth itself, which slips along on its orbital journey, without a single roar, at the rate of 66,600 miles an hour!

The earth is so great in comparison with the tiny airplane that it is not surprising that it travels so much more rapidly. Yet size, it should be borne in mind, means nothing in the analysis of speed. Consider, for instance, the case of a nucleus of an atom, an object so minute in the scale of comprehensible things that it falls within the understanding only of the most profound of scientists. It moves at a rate of speed as great as

30,000 miles a second. It is leisurely, however, as its velocity is measured by the speed of light—186,284 miles a second, 11,177,040 miles a minute, 670,622,400 miles an hour.

## This Is the Age of Speed—What of the Future?

We congratulate ourselves that we are living in an age of speed, everything contrived by man going faster than it ever went before. A hundred years ago our forefathers were satisfied that they, too, were living in an era of speed, with paddle-wheel steamboats snorting past scows, and stagecoaches splashing mud on patient oxen. So on back to the beginning of man's historic tussle with space as measured by time. What will be the sensations of the next age of speed—the one dawning today, the one that will reach its sunset some generations

hence? Perhaps our streamlined trains, our speediest racing cars, our 400-mile-an-hour planes are only hints of what the future holds.

As to one thing, however, we can be fairly certain—in-  
geniety of man will find no way to accelerate the velocity of light or beat the record of the cosmic ray, little matters that were settled definitely in a past as limitless as space itself.

Clever, resourceful man really is not speedy at all without his wheels and his wings, his engines and his gadgets. On his own two legs he is far slower than many of the creatures he dominates. Speediest man runs a hundred yards in 9.4 seconds, which is at the rate of only a little more than 21 miles an hour. He is faster, of course, than the snail, which, according to John J. Ward, a naturalist, travels at a rate of only 12 feet an hour,

or .04 of an inch a second. He is faster than the tortoise, too, judging from the record made by the winner of a turtle (a land turtle is a tortoise) race at Crown Point, Ind., July 30, 1932, which negotiated 68 yards in 5 minutes 14 seconds, traveling at the rate of 775 yards an hour. Speedier is man for a very few yards than ordinary dogs, which, according to the magazine Nature, run at the rate of 20 miles an hour. Pigs travel at 11 miles an hour and chickens run at 9 miles an hour, says the same magazine.

## Beasts and Birds Naturally Endowed with Speed

Animals that depend upon rapid locomotion for protection or for procuring food include a wide variety of species. Some few other species have been bred by man especially for speed. The greyhound, for instance, speediest of dogs, has been clocked on a racing course at speeds in excess of 35 miles an hour. The jackrabbit, frequently outrun by the greyhound, travels at a rate of 25 miles an hour, according to Nature. The pronghorn antelope has been timed by the side of a speeding

(Continued on page eight.)