

statisticians. Even 127 millions is a high figure, for it means eleven people to the square mile, while in Australia there are not one and a-half, and in South America five only.

THE WORLD'S POPULATION IN 1890.

	Total.	To a sq. mile.
Europe	380,200,000	101
Asia	850,000,000	57
Africa	127,000,000	11
Australasia	4,730,000	$\frac{1}{4}$
North America..	89,250,000	14
South America..	36,420,500	5
Total.....	1,467,600,000*	31

The Cultivable Area.—I shut out from consideration all those territories of the Polar regions which lie beyond the limits within which the cultivation of cereals is possible. I divide the remainder of the lands of the globe into three regions. The first I describe as "fertile," meaning that it is fertile so far only as within it lies most of the land which is capable of remunerative cultivation. It cannot be assumed for an instant that the whole or even the greater part of it could ever be converted into fields yielding the fruits of the earth. My second region includes the "steppes" or poorer grass lands; and as within the "fertile" region we meet with comparatively sterile tracts, so within these "steppes" there exist large areas which can be rendered highly productive, especially where means for irrigating the land are available. The third region includes the deserts, within which fertile oases are few and far between.

The area of these regions in square miles I estimate as follows :—

Europe : fertile region, 2,888,000 ; steppe, 667,000 ; total,† 3,555,000.
Asia : fertile region, 9,280,000 ; steppe, 4,230,000 ; desert, 1,200,000 ;

* Exclusive of 300,000 in the Polar regions.

† Exclusive of the Polar regions.

total, 14,710,000. Africa : fertile region, 5,760,000 ; steppe, 3,528,000 ; desert, 2,226,000 ; total, 11,514,000. Australasia : fertile region, 1,167,000 ; steppe, 1,507,000 ; desert, 614,000 ; total, 3,288,000. North America : fertile region, 4,946,000 ; steppe, 1,405,000 ; desert, 95,000 ; total, 6,446,000. South America : fertile region, 4,228,000 ; steppe, 2,564,000 ; desert, 45,000 ; total, 6,837,000. Fertile region : total, 28,269,000 ; steppe : total, 13,901,000 ; desert : total, 4,180,000 ; total, 46,350,000.

The Possible Population.—The task of estimating the number of people whom this earth of ours would be capable of supplying with food and other necessities of life, once it had been fairly brought under cultivation, is very difficult. There are at present some vegetarians ; these would maintain that if their peculiar views were accepted, three men could live where one lives now, and there would be no further need of keeping up large herds of cattle and sheep. I am not sufficiently utopian to believe that mankind generally will ever accept these principles.

Again, it has been asserted that our present methods of cultivation are capable of vast improvement ; that the earth might be made to yield much larger harvests than it yields now ; and that population might thus be permitted to increase without correspondingly increasing the cultivated areas. This is no doubt true as respects many countries, but it is hardly true of the world at large. Making all reasonable allowance, however, for these suggestions, I take as a basis for my estimate the standard of life, such as we find it existing in various climates and among various peoples. Upon this basis, I calculate that the "fertile regions" would be able to support 207 human beings to the square mile, the present mean population of those regions.