

He could not trust to its gratuity of fruits, or rest upon the energy of the arm alone, when the howl of beasts echoed in his rude dwelling. Weapons must be wrested from the earth; and with these, animals must be tamed and yoked, forests bowed, the soil torn up, and the deep and mysterious sea crossed in daring adventure.

As soon as the necessities of life were met by such endeavors, a new field of enterprise was opened up. It opened up in the idea of comfort. Thoughts of ease, security, beauty, and home, sprung into existence; and comforts became an engrossing interest. The habitation, the food, the clothing, the couch, and the state of man assumed a dignity becoming a rude conqueror. He felt his power and wished to enjoy his triumph.

In attaining to this condition, *industry* was taxed. By this, and this alone, was man able to bear up against the pressure of wants, and support life. There was no room for the couch of indolence in the first homes of man. Every observation was needed; every fact was a treasure. Tact was philosophy, and to carry its culture forward, till it assumed the form of portable skill, became the prime object of the chieftain father.

The fruits of these rude endeavours were all garnered, and religiously committed to tradition. The father handed over his wisdom to his son as he handed over his flocks; and in this way the human race became wise by each age being cradled in the knowledge of the preceding one. The Industrial Sciences arose.

The Industrial Sciences embrace the varied exercises of human skill in meeting the necessities and promoting the comforts of man. From a rude and somewhat infantile condition they have grown into a noble state of vigor. They are now distinct sciences, and claim the increasing care of the patriot and philanthropist. They have a place in legislation. Educators are beginning to include them in their schedule of instruction. With the American people, they are prime interests. They form the massive pedestal, on which a free people stand in rearing the superstructure of republican greatness.

AGRICULTURE.

Agriculture is the oldest and most important of the Industrial Sciences. Farming was undoubtedly the earliest employment of man. The cul-

ture of the vine and the tending of flocks are found among the records of the oldest antiquity. Man, as some infidels have supposed, did not begin life in a wretched orphanage. The traditions of the East, the songs of poets, the spirit of the mythology and revelation agree in introducing a matured man to the breast of his earthly mother, and representing him as taught by something more than blind instinct to draw his support from the soil.

In looking back to that distant day, China is the first agricultural nation that claims our notice. Shucktorf has made it more than probable that Noah and his immediate descendants passed into that section of the earth, and carried with them the knowledge of the antediluvian world. This branch of industry has always claimed the care of the Chinese; and to it, more than anything else, is to be attributed their character and the duration of their empire. An agricultural people naturally cultivate the elements of a permanent character.

Egypt early discovered that her wealth was laid up in her soil. The fertile valley of the Nile watered and enriched by a favoring Providence, was tilled by Mizraim. The field of Zoar became a garden; and the legislator, and the priest, and the king watched its ripening harvest, for by its tithes they were chiefly supported.

We cannot linger much longer in ancient times. We must leave the banks of the far-famed Indus and the vale of Cashmere—we must pass over the plains of Chaldea, and the agricultural homes of the Jews, constituted such by the ordination of God—we must hasten across the attractive peninsulas of Greece and Rome, and the rich islands of the Mediterranean Sea. In these quarters, kings guided the honorable plough.

We pause for a few moments at the Anglo-Saxon race. This wonderful people have always evinced a strong love for agricultural life. The whole line of their march, from Southern India across both continents, is marked by the care of cattle and the culture of the soil. To these things they owe much of their development—their bodily and mental vigour, their calm, collected notions, and their practical good sense. Communing with nature in the industrial toil that tills the parental fields, is the happiest and most serene condition of man. It should be at once the wealth and glory of the American. No nation, in ancient or modern times, has owned a richer agricultural inheritance than that which is possessed by us; and when the American farmer brings to his pursuits the contributions of science, farming will be the great source of national wealth.

HUNTING AND FISHING.

The chase was one of the first pursuits of man. His fields, and flocks, and person were to be protected, and called for the club, and trap, and rude spear.

At a later period, the field and flood tempted man to exercises of skill; and hunting and fishing began to put on something of the dignity of art. Beasts ceased to invade the cultivated spots of the earth. The eye and arm of man became a terror.