

ment which underlies and controls all effective political action, and to insist upon its monetary system being as public and open to criticism and conscious alteration as its political system.

"With adequate knowledge of the physical realities that dominate the economic affairs of peoples, the road is clear for unlimited progress and the attainment of universal peace and prosperity. The evils that in the past have paralysed the very heart of nations lie patent and beyond concealment. So they pass beyond the power of further harm. Only that rarest kind of courage—intellectual fearlessness and honesty to face things as they are and not as they appear—is required to abolish poverty and economic degradation from our midst in less time than the War took to run its course. Whilst on the international horizon there dawns the hope that a rational solution may be found to the problem of modern war, and a better use be made of the prodigal gift of science than to destroy the surplus wealth and population in fighting for markets and the increase of national debts.

Idle Industry a Cause

"Were all the most powerful vested interests in the world solid and inter-linked against the cause of humanity and freedom, were money, the lust of power and the distilled essence of all the superstitions that have ever swayed the minds of men, arrayed against the growth of knowledge, who need doubt the ultimate issue? The road is open for all men and women of good-will

to drive onwards to their goal.

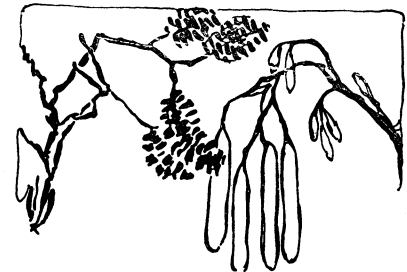
"People know in their hearts that it is only a matter of time before another war will come, greater and more terrible than the last in proportion as it is delayed. Not an iota of the fundamental economic causes which produced the last has been altered. The peace has abundantly sown the seeds of future inevitable national conflict. The vast potential productivity of the industrialized world, particularly in the engineering and chemical industries, must find an outlet. If that outlet is by financial folly denied it in the building up and reconstruction of the home-life of nations, it remains as a direct and powerful incentive to the fomenting of war.

"If anyone doubts, let them visit, for example, a modern steel works—of which there are many in this country, [England] each alone, it is estimated, capable of supplying the total national requirements in our present impoverished state. Even if he chanced on a day when the plant was in full operation, he would see only a man here and there doing almost nothing to speak of, where, only a generation ago, the place would have been alive with an army of almost naked workmen rushing about and shepherding the moving flow of incandescent steel. A few 15,000-h.p. motors, worked with the sunshine of the summers of the palaeozoic era, have emancipated the human worker to leisure in the streets, to live on the dole and rear his family so against the day when the nation shall need them all again, and war, the consumer, shall turn all this potential wealth into national debt. Yet we affect to be shocked by the customs of the ancients, who exposed their superfluous young naked to the rigours of the winters' night, or sacrificed them with music and religious fervour on the altars of Moloch and Mammon."

Science News Letter, February 25, 1933

Archaeologists excavating the Egyptian town of Karanis have found a large fort-like building, and scraps of papyrus written in military red ink indicating that a Roman legion was stationed in or near the building.

Government tests show that school children who drink milk through a straw fail to get the richest part of the milk, if they leave some in the bottle—unless the bottle is shaken up first, or unless the milk is homogenized to break up the fat particles.



A Pleistocene Rearguard

ONE GEOLOGICAL episode ago, when the line of permanent snow crept southward a little each century, until at last the whole land groaned with ice as far south as Ohio, Iowa and Kansas, one forerunner of the cold must have been the alder bush, thrusting itself in among the forests of the then warmer climate and warning them that they were about to be dispossessed. When the ice retreated, after sundry tens of thousands of years, the bulk of the alder army trooped after it, but a strong rearguard still remains with us. One species, indeed, the smooth alder, even maintains its outposts as far south as Florida and Texas.

The alder tells us of its high-northern origin and affinities by its blossoming habit. It is earliest of all trees and shrubs to flower, trailing out its catkins in the cold air of March, or even of late February, when even the furred pussy willows are dubious about venturing forth.

Like the willows and birches and poplars and other earliest-blossoming things, the alder is a wanton and a spendthrift of its flowers. It bears them in great numbers, strung together in bunches or strings, which learned botanists call "aments" among themselves, and unbend sufficiently to call them "catkins" for the benefit of the less schooled. Like the willows also it bears male and female flowers on separate bushes, producing vast quantities of pollen and depending on the wind to carry the fertilizing grains to the female flowers. It must needs depend on the wind for at alder-blossom time there are very few insects abroad.

Science News Letter, February 25, 1933

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The Science Service radio address next week will be on the subject

SQUARING THE CIRCLE

by

Dr. Edward Kasner

Professor of Mathematics at Columbia University

FRIDAY, MARCH 3

at 12:45 P. M. Eastern Standard Time

Over Stations of The Columbia Broadcasting System