

She was standing on the rear platform, and the world was waking up under the first hint of coming sunlight. The train was running slowly, and the air was full of cool stillness. She glanced around at his step, then turned away with a displeased look.

"Please let me tell you how sorry I am," he said humbly. "I've been anything you choose to call me and worse. But I slid into it without quite realizing, and then—I'd have done anything to keep you from getting down on me."

She turned away a little more positively. "I don't care to discuss the matter," she said. "You've put me in a very unpleasant position and deceived me right and left. I couldn't trust you again."

"But I lied very badly. You must have noticed that," he pleaded.

The memory of Marguerite and the divorce and the postal and her wasted sympathy hardened her face.

"I must ask you not to annoy me," she said.

Beverley stood looking down at her for a moment, then turned away without a word. In a few minutes he was back again with his bag and sticks.

"Will you say good by to me?" he said. She looked surprised in spite of herself.

"I am going to drop off at the next station," he explained, "and go on by

another train. My being here under the circumstances will annoy you—and hurt me. I have taken the liberty of falling in love with you."

He saw the struggle going on in her. When she muttered "Good by" he knew it was because she was afraid of crying if she said more.

"Will you let me leave this with you?" he said, writing his address on his card. "Then, if ever——"

She glanced at the card, then up at him with a startled air.

"Kirk Beverley?" she exclaimed. "Kirk Beverley! Oh, why didn't you say so in the first place!"

"Do you know me?" he asked, bewildered.

She colored and looked away.

In her mind was a picture of a beach and a small girl following humbly about after a big boy, a nice boy, who ruled the beach sport for the summer, and never dreamed that a little hanger on, in all the humility of first love, was yearning to be noticed. They were the same eyes, too.

"I did once, years ago; only you didn't know it," she said.

The train stopped with a jerk and he held out his hand.

"Here's my station," said Beverley.

"But—you haven't heard yet how I know you. Can't you—wait till the next?" she said.

#### A LYRIC OF AUTUMN.

WHEN the cheek of the haw grows deeper,  
And the quail begins to pipe,  
When the fruit on the crimson creeper  
Hangs purple ripe,  
When the frosty breezes greet one  
Striding the morning land,  
Then it's oh, my true and sweet one,  
Give me your hand!

When the leaf on the linden lusters,  
And the southering wild fowl clang,  
When the pendant fox grape clusters  
Have a winy tang,  
When the hills that slope beyond one  
Swim in a half eclipse,  
Then it's oh, my fair and fond one,  
Give me your lips!

When the nights wax clear and crisper,  
And the corn is red in the ear,  
When the willows lean and whisper  
Down by the weir,  
Ere the wolf winds lift their snarling—  
With troth of "never to part,"  
Then it's oh, my dear and darling,  
Give me your heart!

*Clinton Scollard.*

# THE WORLD'S FOOD SUPPLY.

BY EDWARD S. HOLDEN, LL.D.

IS MANKIND IN DANGER OF STARVATION?—MALTHUS' OLD QUESTION OF THE PRESSURE OF POPULATION UPON THE MEANS OF SUBSISTENCE RAISED AGAIN, AND ANSWERED IN THE LIGHT OF PRESENT CONDITIONS.

JUST a hundred years ago affairs in England were gloomy indeed. The Napoleonic wars pressed hard on English commerce. English agriculture was prostrate under a long succession of bad harvests. The average price of a quarter of wheat in the years 1771-'80 was about 34 shillings. From 1791 to 1800 it was 63 shillings. In the decade from 1811 to 1820 it rose to 87 shillings. During the years 1793 to 1815 the national debt was increased yearly by enormous amounts, so that in 1816 England owed nine hundred million pounds sterling, or \$4,500,000,000—something like \$225 for every man, woman, and child in the kingdom.

At this very time, inspired by these conditions, the celebrated Malthus published—in 1798—the first edition of his "Essay on the Principles of Population," which was the earliest attempt to discover the relations existing between the population of the world and its food supply. The conclusions of Malthus made a profound impression on his contemporaries, and they have influenced all subsequent thinking. They were not all true; many of them were entirely misunderstood in his own day and are still misconceived. He was the first philosopher to emphasize "the struggle for existence," and to work out some of its consequences, as Darwin, two generations later, worked out many others. Whether he interpreted the consequences correctly or not, it is certain that the struggle exists: on the one hand, there are just so many mouths to be fed; on the other hand, there is just so much food to supply their wants.

The land area of the earth is limited, and can produce no more than a fixed maximum of food. Each individual of the population of the globe must eat or die. If he is not reasonably sure, today, of food for the morrow, he lives in anxiety and wretchedness. Population cannot,

then, increase beyond a certain maximum without entailing universal misery. Such is a statement of so much of the Malthusian doctrine as concerns us here, in the rather general and loose form in which it is commonly received. There are two factors—number of mouths to be fed, and food to supply them—and there is a definite relation between the two.

Now, the food supply is strictly conditioned by the area of the cultivated land and by the productiveness of the soil. In a limited region like England, for example, there are just so many acres available for the cultivation of wheat (for Englishmen are very much given to thinking of all the world as bread eaters and of all food supply as wheat) and each acre can produce only so much wheat at a crop. It is obvious that under the pressure of necessity every energy would be bent to increasing the product per acre, and every resource of science brought in to aid. It is conceivable, Malthus says, that in each generation the product might be increased by a quantity equal to the original yield. If, for instance, a certain region produced *one* million bushels of wheat in 1800, we may conceive that by strenuous exertions it could be made to yield *two* millions in 1833, *three* millions in 1866, *four* millions in 1899, and so on. Every generation of workers, by immense labor, patience, and skill, and by taking advantage of every discovery in science, might be able to add to its wheat product a quantity equal to the original harvest of its fathers. Starting at any generation, the wheat supply might be represented in succeeding generations by the numbers

2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, etc.

But in the mean time the population will be increasing. Let us suppose that each married pair has four children who grow to maturity. In each generation the population will be doubled. The num-