# SCIENCE

## FRIDAY, AUGUST 5, 1910

CONTENTS	
The Future Wheat Supply of the United States: PROFESSOR M. A. CARLETON	161
Miss Matilda H. Smith: L. O. H.	171
The Summer Meeting of Section E of the American Association: Dr. F. P. GUILIVER	171
Scientific Notes and News	172
University and Educational News	174
Discussion and Correspondence:— The Bearing of Psychrometer Readings on Measurements of Martian Aqueous Vapor: Dr. FRANK W. VERY	175
Quotations: Medical Appointments at Vienna	177
Scientific Books:— Warren on the Mammals of Colorado: DB. J. A. ALLEN. Buller's Researches on Fungi: PROFESSOB G. H. CONS. Rich- ards's Experimentelle Untersuchungen über Atomgewichte: PROFESSOB WILHELM OST- WALD	178
Scientific Journals and Articles	181
A New Principle in the Mechanism of Nuclear Division: Professor Hugo de Vries	182
Special Articles:— Unisexual Broods of Drosophila: L. S. QUACKENBUSH	183
The Twenty-second Annual Meeting of the Geological Society of America: Dr. Edmund OTIS HOVEY	185

# THE FUTURE WHEAT SUPPLY OF THE UNITED STATES<sup>1</sup>

THE subject of our future wheat supply is seen at once to involve four separate questions, as follows: (1) What is the possible increase in production that may be attained? (2) How may it be attained? (3) What is the probability of such attainment? (4) Will this production satisfy the demand?

It is evident also that no tangible benefit can come to the reader of any discussion of this subject which does not have application to some definite period of time. It is assumed, therefore, in this present discussion that we are concerned with movements in the next forty years—or a period closing with the year 1950.

# POSSIBLE INCREASE IN WHEAT PRODUCTION

An increase in wheat production can arise in two ways: (1) By an increase in the wheat acreage, and (2) by an increase in acre yields.

### INCREASING THE WHEAT ACREAGE.

The wheat acreage may be increased through an expansion in the farm area and also by devoting a larger percentage of the present farm area to wheat.

Expansion of the Farm Area.—The total land area of the United States is 1,900,-947,200 acres. By the census of 1900 it was shown that at that time 44.1 per cent. of this area, or 838,591,774 acres, was included in farms. The farms were of all sizes, and of course were not entirely cultivated, many of them in fact, being large <sup>1</sup>Read before the Millers' National Federation Mass Convention at Minneapolis, June 22, 1910.

MSS, intended for publication and books, etc., intended for review should be sent to the Editor of SCIENCE, Garrison-on-Hudson, N. Y.