

Description of soil.	No. of soil.	Total volatile per cent.	Humus per cent.	Total nitrogen per cent.	Ratio.
10 years cultivation.....	257	8.68	2.48	0.19	13.10
15 " "	234	6.47	2.48	0.20	12.40
3 " "	220	12.40	4.17	0.37	11.28
3 " "	218	6.56	3.73	0.30	12.43
20 " "	261	8.73	2.84	0.26	11.31
30 " "	279	8.31	1.80	0.16	11.25
40 " "	242	7.04	2.41	0.21	11.50
6 " "	222	10.33	3.42	0.28	13.00
18 " "	269	9.44	3.91	0.34	11.50
25 " "	290	3.54	2.27	0.17	13.35
6 " "	273	8.13	4.18	0.37	11.33
18 " "	249	7.94	2.04	0.17	12.00

There is, on the average, about twelve parts of humus in the soil, as determined by the method given, to every one part of nitrogen. In the long cultivated soils which have received no fertilizers, the nitrogen and the humus have decreased in about the same ratio. The losses and relationships are not in strict accordance to a mathematical ratio, but it is sufficient to show that there is a relationship between the humus and the nitrogen in a virgin soil, and in soils which have been cultivated without the use of fertilizers.

UNIVERSITY OF MINNESOTA,
LABORATORY OF THE
COLLEGE OF AGRICULTURE.

NOTES.

The Opening of the Kent Chemical Laboratory of the University of Chicago.—In response to invitations sent out by the authorities of the University of Chicago to the chemists throughout the country to be present at the formal opening exercises of the Kent Chemical Laboratory, January 1 and 2, 1894, about fifty chemists assembled in the auditorium of the laboratory, at two o'clock P. M., January 1. It was proposed that the first meeting should be a conference of teachers of chemistry. President Harper delivered a brief address of welcome and closed by saying that Prof. Remsen had consented to act as chairman of the conference—Prof. Remsen then took the chair and after a few introductory remarks introduced Prof. Paul C. Freer, of the

University of Michigan, who had been invited to open the discussion by reading a paper on, "The Teaching of Chemistry in Secondary Schools and Colleges." After Prof. Freer's paper which was very suggestive, a general and spirited discussion ensued which was alike enjoyable and helpful to all present.

At six o'clock dinner was served at the hotel Windermere to the visiting chemists who were the guests of the University. The dinner was elegant in every particular. No "after dinner speeches" were made but during the progress of the courses president Harper announced that it had been proposed that the chemists present, organize a chemical society of some sort and as he knew very little about it he would call on Prof. Nef to state the nature of the proposed plan—Prof. Nef said that the idea was to organize a society of teachers of chemistry to meet at least once a year to discuss methods of teaching chemistry. He invited discussion and after remarks by a few chemists, a motion was made and carried, referring the whole subject to a committee, to be appointed by the chairman, to report to a meeting to be held the next morning at nine o'clock, in the auditorium of the Kent Laboratory. President Harper asked Prof. Remsen to appoint the committee, and he named: Profs. A. B. Prescott, J. U. Nef, P. S. Baker, W. W. Daniells, and A. V. Young.

Immediately after the dinner the chemists returned to the auditorium of the laboratory where at eight o'clock the dedicatory exercises began. President Harper with Mr. Sidney A. Kent headed the procession, followed by Prof. Remsen, Rev. Dr. Northrup, Prof. Nef, the visiting chemists and the faculty of the University. The visiting chemists occupied front seats in the audience while the speakers, Mr. Kent, and the faculty sat on the platform. The dedicatory prayer was delivered by Dr. Northrup, of the University of Chicago. President Harper then delivered a short address in which he read the letter of donation from Mr. Kent. It was as follows:

"Mr. William R. Harper, president of the University of Chicago—My Dear Sir: I hereby give this building, fully furnished and completely equipped, to the University of Chicago as a chemical laboratory for the use of this and future generations. Trusting that the standard of educa-

tion will be such as to command the respect not only of this country but of the civilized world.

Very Truly Yours,

"Chicago, Jan. 1, 1894."

S. A. KENT.

Prof. Ira Remsen, of Johns Hopkins University, who had planned the laboratory was then introduced. He made a very graceful address and at the close he thanked Mr. Kent in behalf of the chemists of the country for the substantial aid he had given the science in building so magnificent and complete a workshop.

Prof. J. U. Nef, under whose immediate supervision the laboratory had been built, and who planned most of the detail of the interior fittings was then introduced. He delivered an interesting address entitled, "Important Factors in the Development of a Research Laboratory."

At the conclusion of Prof. Nef's address, president Harper called on Prof. A. B. Prescott, of the University of Michigan, as the oldest teacher of chemistry present to make some remarks. Prof. Prescott delivered a brief impromptu address in his usual happy and pointed style. At the conclusion of the addresses a reception was held in the Halls of the laboratory.

The laboratory and equipment has cost Mr. Kent \$235,000.00, and it is very handsome, convenient and complete. It is to be hoped that the plan with detailed description will be published before long.

Mr. Kent is the brother of the founder of the Kent Chemical Laboratory, of Yale University. In the vestibule of the main entrance on the east wall in a handsome medallion bas-relief of Mr. Kent and below it is the dedicatory inscription which reads thus:

"This building is dedicated to a fundamental science in the hope that it will be a foundation stone laid broad and deep for the temple of knowledge in which as we live, we have life.—Sidney A. Kent."

On the morning of January 2, at nine o'clock, the visiting chemists assembled to hear the report of the committee appointed the night before at the dinner. The report provided for a conference of chemists to be held annually at such time and place as may be decided each year by the conference. No organization was made other than the formation of a standing

committee of three (3) members who are to make the necessary arrangements for the meeting, the chairman of the committee is to act as secretary of the conference. The committee for 1894 consists of Profs. J. U. Nef, P. S. Baker, and P. C. Freer. The object of the conference is to discuss methods of teaching and no papers on research are to be read. The meetings are to be arranged so as not to conflict with the meetings of the American Chemical Society and it was the sense of the meeting that whenever possible the conference should be held in conjunction with the meeting of the American Chemical Society.

The Winter Convocation of the University was held in Central Music Hall, January 2, at eight o'clock P. M. The convocation address being delivered by Prof. Ira Remsen who took as his subject, "The Chemical Laboratory." He spoke of the origin and development of the modern chemical laboratory and of the character of the work which had been done in the great laboratories of the world; of the work which had been accomplished in this country and of the prospects for the future. His address was highly entertaining and was enjoyed by a large audience composed of the faculties, official guests, students, and friends of the University. After the exercises a reception was held by the president in honor of Prof. Remsen in the foyer of the Music Hall.

The committee of arrangements who had charge of all of the exercises consisted of Profs. J. U. Nef, R. D. Salisbury, C. A. Strong, W. S. Stratton, and J. Loeb.

They are to be congratulated on the success of their management.

W. L. DUDLEY.