a no less mental tax, without adequate recompense. To the teacher, however, for whom it is especially designed, it will doubtless prove quite acceptable as an auxillary to the more elementary text-books.

Several considerations appeared to demand a rather full examination from the "standpoint of the working-geologist of Glaciers." (1.) There is so urgent a demand for a standard work representing fully the present status of American Surface Geology (or Kaineontology, as the writer prefers to term that branch of Geology), that almost any book on the subject might be adopted as such without duly weighing its fitness for the position. (2.) In its ambitious style and assumptious ensemble the work under review is quite unlike the ordinary text-books. (3.) It is the initial volume of an extended and costly series of works which, from their titles and the fact that they carry with them the prestige of a leading university, might naturally be regarded as the highest American authorities on the subjects treated. (4.) It was not deemed just to working geologists to suggest that the (4.) It was not book could well be dispensed with without at the same time furnishing, as fully as practicable, the means of forming an independent judgment.

FARLEY, Iowa, Nov. 12, 1881.

LIVING OBJECTS FOR THE MICROSCOPE,

Mr. A. D. Balen, of Plainfield, New Jersey, has undertaken to collect living organisms suitable for microscopical investigations, and forward them by mail to those interested in such studies.

This is a great convenience to those living in cities, or

those who are unacquainted with the localities where collections of particular forms can be made.

Among the living objects which Mr. Balen has sent out to his correspondents may be mentioned-

POLYZOA.—Pectinatella, Plumatella and Fredericella. INSECTS.—Larva of Dragon Fly and Dyticus (water

tigers).
Entomostraca.—Bosmina, Daphnella, Diaptomus and Sida.

WORMS.—Nais, Stylaria and Planaria.

ROTIFERS.—Lacinularia, Conachilus, Floscularia, Melicerta, Limnias and Noteus.

POLYPS.—Hydra, with the curious parasite Urceolaria pediculus.

BELL ANIMALCULES .- Vorticella, Carchesium and Epistylis, Stentor, Vaginicola and Cothurnia.

INFUSORIA.—Spirostomium, Euglena and Dinobryon. RHIZOPODS.—Arcella, Actinophrys and Clathrulina. SPONGE.—Spongilla.

PLANTS .- Utricularia, Vallisneria, Anacharis and Nitella, Volvox, Protococcus and Pediastrum.

DIATOMS.--Surirella, Gomphonema and Fragilaria. DESMIDS.—Scenedesmus, Desmidium and Micraste-

We hope that microscopists will support Mr. Balen in this little enterprise, for it will prove of the greatest benefit to them. A specimen package will be sent for 30 cents.

THE giant forces which scientific discovery is putting in the hands of engineers bid fair to develope a particular form of the profession.—Engineering News.

METEOROLOGICAL REPORT FOR NEW YORK CITY FOR THE WEEK ENDING DEC. 24, 1881. Latitude 40° 45′ 58″ N.; Longitude 73° 57′ 58″ W.; height of instruments above the ground, 53 feet; above the sea, 97 feet; by self-recording instruments.

| | THERMOMETERS. | | | | | | | | | | | | | | | |
|---|--|--|--|----------------------------|--|--|--|--|---|----------------------------|--|--------------|--|----------------------------|--|--------------------------|
| | MEAN FOR | MAXII | MUM. | MINIMUM. | | MEAN. | | | MAXI | MUM. | MINIMUM. | | | | MAXI'M | |
| DECEMBER. | Reduced to Freezing. | Reduced to Freezing. | Time. | Reduced to Freezing. | Time. | Dry Bulb. | Wet Bulb. | Dry Bulb. | Time. | Wet Bulb. | Time. | Dry Bulb. | Time. | Wet Bulb. | Time. | In Sun |
| Sunday, 18 Monday, 19 Tuesday, 20 Wednesday, 21_ Thursday, 22 Friday, 23 Saturday, 24 | 30.137 30.309 30.159 30.276 29.864 29.405 30.188 | 30.264 30.382 30.288 30.318 30.228 29.774 30.300 | 12 p. m. 10 a. m. 0 a. m. 10 a. m. 0 a. m. 12 p. m. 11 p. m. | 30.264 30.112 30.152 | 7 a. m. o a. m. 3 p. m. o a. m. 12 p. m. 1 p. m. o a. m. | 41.3 40.3 42.6 40.7 49.3 42.6 27.0 | 37.3 38.0 39.0 37.0 47.3 42.0 26.0 | 50 45 47 43 53 55 32 | r p. m. 3 p. m. 4 p. m. 3 p. m. 4 p. m. 12 m. 3 p. m. | 41 42 39 51 53 | 1 p. m. 3 p. m. 4 p. m. 0 a. m. 4 p. m. 7 a. in. 3 p. m. | | 7 a. m. 8 a. m. 4 a. m. 8 a. m. 2 a. m. 12 p. m. 8 a. m. | 34 36 36 38 25 | 7 a. m. 8 a. m. 6 a. m. 8 a. m. 2 a. m. 12 p. m. 8 a. m. | 85. 65. 78. 49. |

 Mean for the week
 30.048

 Maximum for the week at 10 a, m., Dec. 19th
 30.382

 Minimum
 at 12 p, m., Dec. 23d
 29.268

 Range
 1.114

at 7 am 23d, 53. at 8 am 24th, 21.

| WIND. | | | | | | | | HYGROMETER. | | | | | | CLOUDS. | | | RAIN AND *SNOW. | | | |
|------------------------------|-------------------|----------------------|------------------------------------|-----------------------------|--|---|-----------------|----------------------|----------------------|-----------------------|----------------------|----------------|--|-------------|-----------------|------------------------------------|-------------------------------|-------------------------------|--------------------|-------------|
| | DIRECTION. | | | VELOCITY IN MILES. | L | ORCE IN BS. PER R. FEET. | FORCE OF VAPOR. | | | RELATIVE HUMIDITY. | | | CLEAR, OVERCAST. | | 0 | DEPTH OF RAIN AND SN IN INCHES. | | | ozo | |
| DECEMBER. | 7 a. m. | 2 p, m, | o p. m. | Distance for the Day. | Max. | Time, | 7 a.m. | 2 p. m. | 9 p. m. | 7 а. т. | 2 p. m. | 9 p. m. | 7 a.m | 2 р. ш. | 9 p. m. | Time of Begin- ning. | Time of End- ing. | Dura- tion h. m | Amount of water | 0 10 |
| Monday, 19- | n. w. w. s. w. | | n. w. s. w. w. n.w. n. e. | 230 92 182 119 | 2 1 2 ¹ / ₂ 2 | 7,00 am 11,10 pm 3,15 pm 5,50 am | .183 | .153 .195 .169 | .199 .221 .208 | 89 90 81 72 | 44 67 54 58 | 8 ₃ | 3 cir. cu. 1 cir. 8 cir. cu. 2 cir. | ı cir. | o o 8 cu. | | 12 pm | 2.00 | | 0 0 0 |
| Thursday, 22. Friday, 23. | | s. s. e. n. n. e. | s. | 154 265 | 3 124 | 1.15 am 5.00 pm | | ·334 | .348 | | 100 | 86 100 | | 10 9 cu. | 8 cu. | o am 7.45 pm o am 5 pm | 3 pm 12 pm 4 am 8 pm | 15.00 4.15 4.00 3.00 | .23 .30 .20 | 0 |
| Saturday, 24- | n. n. e. | n. w. | n.w. | 178 | 2 | 1.20 am | .113 | .113 | .167 | 100 | 67 | 100 | 0 | 0 | 0 | | 1 | | | 0 |

121/1 lbs.