

SOME ANALYSES OF CARBON MINERALS.

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The following analyses of fourteen specimens of Carbon Minerals, from the collection illustrating Economic Geology at the School of Mines, Columbia College, were made according to the methods described in Cairn's Quantitative Analysis, and have not previously been published.

The specimens were nearly all collected by Prof. J. S. Newberry, whose paper on The Origin and Relations of the Carbon Minerals (Annals of the New York Academy of Sciences, Vol. II., No. 9, 1882), describes the formation of these minerals.

| | Water. | Carbon. | Hydrogen. | Sulphur. | Nitrogen. | Oxygen. | Ash. |
|--|--------|---------|-----------|----------|-----------|---------|-------|
| <i>Peats.</i> | | | | | | | |
| Ravenna, Ohio. Surface..... | 7.95 | 57.84 | 7.10 | .20 | .84 | 21.12 | 4.95 |
| " " Bottom..... | 12.60 | 41.81 | 6.95 | 6.26 | 2.24 | 16.48 | 13.66 |
| <i>Lignites.</i> | | | | | | | |
| Kannarrab, Utah. Cretaceous..... | 7.45 | 53.95 | 8.30 | .90 | .98 | 23.57 | 4.85 |
| Cedar City, "..... | 2.39 | 59.55 | 6.68 | 1.22 | .98 | 25.89 | 3.29 |
| Canon City, Colorado..... | 5.65 | 56.95 | 4.65 | 1.19 | .28 | 27.66 | 3.62 |
| Morrison, "..... | 8.20 | 64.05 | 4.80 | .51 | .70 | 17.24 | 4.50 |
| Fort Berthold, Dakota..... | 8.00 | 57.20 | 5.22 | 1.88 | .70 | 25.52 | 1.48 |
| Carbon Station, Wyoming..... | 7.35 | 63.65 | 4.60 | .76 | 1.40 | 19.41 | 2.80 |
| Point of Rocks, "..... | 5.35 | 70.50 | 4.50 | .98 | 1.12 | 12.35 | 5.20 |
| <i>Coking Coal.</i> | | | | | | | |
| Crested Butte, Colorado..... | 1.00 | 74.29 | 7.49 | .61 | 1.40 | 9.17 | 6.04 |
| <i>Anthracites.</i> | | | | | | | |
| Queen Charlotte's Island, British Columbia.... | 1.90 | 75.95 | 6.03 | .95 | 1.40 | 6.81 | 7.96 |
| Crested Butte, Colorado..... | .72 | 82.50 | 5.15 | .85 | 1.12 | 4.55 | 5.21 |
| <i>Albertite.</i> | | | | | | | |
| Castle Valley, Utah..... | .67 | 71.30 | 7.96 | .70 | .28 | 18.05 | 1.04 |
| <i>Shale.</i> | | | | | | | |
| Green River, Wyoming..... | 2.40 | 35.35 | 6.41 | 1.29 | .84 | 2.79 | 50.92 |