

Is found in large masses in the province of St. Juan de Berengela in South America.

470. RETINASPHALT.—Retinasphalt; Phillips, Beudant, Mohs. Retinit; Hausmann, Haidinger.

Amorphous. Fracture conchoidal. Semi-transparent... opaque. Yellow, brown, grey. Streak yellowish-brown. Brittle. $H = 1.0 \dots 2.0$. $G = 1.05 \dots 1.20$. Acquires resinous electricity by friction.

Burns with a flame, and emits a bituminous aromatic smell.

Analyses of retinasphalt *a* from Bovey by Hatchett, *b* from Halle by Bucholz, *c* from Cape Sable by Troost, *d* from Bovey by Johnston:—

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
Resin soluble in alcohol	55	91	55.5	59.32
Substance insoluble in alcohol	41	9	42.5	27.45
Earthy matter	3	—	1.5	13.23

It is probable that different substances are united under the name retinasphalt.

Is found in brown coal near Halle, at Laubach in the Vogelsgebirge, Bovey in Devonshire, Cape Sable in Maryland, at Radnitz in Bohemia in stone coal, near Osnabrück in peat.

471. COPALINE.—Fossil copal; Phillips. Copale fossile; Dufrenoy. Copalin; Hausmann. Retinit; Haidinger.

Amorphous. Fracture conchoidal. Semi-transparent... translucent. Lustre waxy. Yellow, yellowish-brown. $H = 2.5$. $G = 1.046$. Brittle. When heated emits a resinous, aromatic smell. Melts into a clear fluid. Burns with a bright yellow flame and much smoke, leaving little or no residue. Very slightly soluble in alcohol and æther.

Analyses of copaline *a*, *b* from Highgate by Johnstone, *c* from the East Indies by Duflos:—

	<i>a</i>	<i>b</i>	<i>c</i>
Carbon	85.41	85.68	85.73
Hydrogen	11.79	11.48	11.50
Oxygen	2.67	2.84	2.77
Ash	0.13	—	—

Is found in blue clay at Highgate near London and in the East Indies.

472. WALCHOWITE.—Walchowit; Hausmann, Haidinger.