AND OTHER MINERALS-GILPIN.

to that of the best Welsh steam coals. It may be remarked that the best American and Welsh coals would be classified as free burning, semi-anthracite, while the Springhill coals are bituminous and coking.

I also give here an analysis of the Patrick seam as worked on the Patrick Lease, now the property of the Canada Coals and Railway Company, on the west bank of the Macan River. The sample is from the lower part of the seam :---

Moistur			1.00
Volatile	Combustible Matter	••	55.61
Fixed C	arbon	•••	35.60
Ash		••	7.49
Sulphu	••••	••	.50

As reddish and pulverulent.

Water contained in 1000 parts.

Sulphate of Lime	.514
Magnesia	.100
Silieious matter	$\cdot 190$
Chloride of Sodium	1.452
Carbonate of Sodium	7.509
fron and Alumnina	Trace.
Organic matter	Trace.
No free acid.	

Springhill, from feeder 1300 feet level, water clear, free from smell, slightly acid :---

Sulphuric Acid, free	Trace.
Sulphate of Lime	Large.
" Magnesia	Small.
Chloride of Sodium	Considerable.
Carbonic Acid	Small.
Carbonate of Lime	Small.
Iron Oxides	Small.

Water exerted slightly corrosive action on iron exposed to it for twenty-four hours.

A number of analyses of Nova Scotia mineral and pit waters are given in a paper by the writer, read before the Newcastle Mining Institute some years ago.

251