

MR. STAGE'S ANALYSES

Of the coal received from Sandfeldgaard, average samples were selected so as to include both larger and smaller pieces in equal proportion. The finely powdered samples could not for the most part be pressed into the form of briquettes, for the purpose of determining the fuel-value, without some water being pressed out. A portion of each, therefore, was dried in a water-bath to constant weight, and these portions were used for the determinations. The fuel-values are indicated partly as the total found by Berthelot-Mahler's calorimeter, partly as the useful value, i.e., the total minus the amount of heat, which the water-vapour, formed on combustion, might be considered to take from the fire. This is estimated at 650 kg. per kilo. water-vapour. Further, the fuel-value of the water and ash-free substance has been calculated in order to form some idea of the greater or less bituminous character of the combustible material.

LIGNITE FROM SANDFELDGAARD (ALF STAGE)

UNDRIED SAMPLES					DRY SUBSTANCE					Fuel-Value in substance free of water and ash		
No. of Sample	% Water	% Ash	% Sulphur	% Ash	% Sulphur	Fuel-Value			% of Water formed by Combustion	Total	Useful	
						2 Determinations	Average	Useful Fuel-Value				
Lignite.	I.....	13.3	17.0	4.17	19.6	4.81	4,191 4,501	4,497	4,242	39.2	5,593	5,276
	II.....	29.1	7.2	3.60	10.2	5.07	5,596 5,646	5,621	5,336	43.9	6,259	5,912
	III.....	21.4	5.6	3.25	7.1	4.13	5,853 5,823	5,838	5,565	41.9	6,284	5,996
	IV.....	13.2	9.2	4.51	10.6	5.23	5,129 5,182	5,155	4,915	36.9	5,766	5,498
	V.....	23.4	12.4	3.98	16.1	5.19	4,833 4,854	4,843	4,610	35.9	5,773	5,494
	VI.....	17.4	20.8	4.05	25.2	4.90	4,037 4,029	4.633	3,859	26.8	5,281	5,159
Lignite gyttje.	VII.....	18.3	38.0	2.57	16.6	4.14	2,885 2,905	2,895	2,703	29.6	5,421	5,062
	VIII.....	17.1	39.6	3.06	17.8	3.70	2,811 2,814	2,811	2,624	33.8	5,448	5,027
	IX.....	9.8	40.2	3.12	44.6	3.46	3,221 3,217	3,220	2,980	37.0	5,812	5,379
	X.....	8.5	25.8	2.48	28.2	2.71	4,480 4,181	4,482	4,250	35.5	6,262	5,919
	XI.....	12.8	23.9	2.02	27.3	2.32	4,177 4,509	4,493	4,275	33.5	6,180	5,880