



Georgii Agricolae de re metallica libri XII. Froben, Basel; 1556; book VI, p.125. Woodcut of the fifth 'machine' for raising ore or water from mines. This horse-powered winch, shown as occupying three levels at the pithead, has a brake to stop the machine when a full bucket is to be emptied. The brake is applied by the workman on the lowest level sitting on the L-shaped seat to depress it, then fixing it down by wedging the plank he is holding against the roof.

Free translation of figure legend. A: Toothed wheel attached to the [vertical] shaft. B: Horizontal shaft. C: Wheel made of metal castings [a pinion]. D: Wheel near the latter [in fact, the brake drum]. E: Drum made up of round bars [the winding drum]. F: Brake-lever [this refers to the beam passing through the ground which, when pulled down, forces the depression in the beam H against the drum D]. G: Pivoted beam. H: Short beam [which carries the brake shoe]. I: Hook [to tilt the hoisted bucket for emptying].

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The Sibbald Library's summer exhibition

The Sibbald Library's summer exhibition complemented the 2011 World Congress of Epidemiology held in Edinburgh. Inevitably College treasurer James Lind's groundbreaking controlled trial *Treatise on the Scurvy* was displayed along with John Snow's classic work on the mode of communication of cholera. However the extraordinary scope of the collection here in Queen Street was perhaps best illustrated by some of the other epidemiology classics that featured in the exhibition. For instance there is much material of epidemiological relevance in an early addition to the library – a 16th century classic on metallurgy.



FIGURE 1 Georgius Agricola. *De re metallica Hieron. Frobenium et Nicolaum Episcopium, Basileae, 1556.*

Written by a German physician Georgius Agricola, *De re metallica* describes conditions in Jachymov in the Czech Republic which was one of the most important mining regions in Europe in the 16th century (Figure 1). Agricola's spectacular book, which is illustrated by 292 woodcuts, is one of the first reference works on mining and metallurgy. The encyclopaedic volume doesn't just cover technology and geology but also describes the many occupational health issues faced by miners. The large risk of accidents, the dangers of poor ventilation (particularly when

The Years of our Lord	1647	1648	1649	1650	1651	1652	1653	1654	1655	1656	1657	1658	1659	1660
Abortive and Still-born	335	329	327	351	389	381	384	433	483	419	463	467	421	544
Aged	916	835	889	696	780	834	864	974	743	892	869	1176	909	1095
Ague and Fever	1260	884	751	970	1038	1212	282	1371	689	875	999	1800	2303	2148
Apoplex and Suddenly	68	74	64	74	106	111	118	86	92	102	113	138	91	67
Bleach			1	3	7	2				1				
Blasted	4	1			6	6			4		5	5	3	8
Bleeding	3	2	5	1	3	4	3	2	7	3	5	4	7	7
Bloody Flux, Scouring and Flux	155	176	802	289	833	762	200	386	168	368	362	235	346	251
Burnt and Scalded	3	6	10	5	11	8	5	7	10	5	7	4	6	6
Calcuture	1			1		2	1							
Cancer, Gangrene and Fistula	26	29	31	19	31	53	36	37	73	31	24	35	63	52
Wolf				8										
Canker, Sore-mouth and Thrush	66	28	54	42	68	51	53	72	44	81	19	27	73	68
Child-bed	161	106	114	117	209	213	158	192	177	201	236	225	226	194
Chirims and Infants	1369	1254	1065	990	1237	1280	1050	1343	1089	1393	1162	1144	853	1123
Colick and Wind	103	71	85	82	76	102	80	101	85	120	113	179	116	167
Cold and Cough							41	36	21	58	30	31	33	24
Consumption and Cough	2423	2200	2388	1988	2350	2410	2286	2868	2666	3182	2757	1610	2982	3414
Convulsion	684	491	530	493	569	653	604	823	702	1027	807	841	742	1031
Cramp														

FIGURE 2 John Graunt. *Natural and political observations made upon the Bills of mortality.* 3rd edition Martyn and Allestry London 1665.

heating rocks to extract metals) and more unexpected hazards like venomous ants are all covered.

John Graunt who worked as a London draper is a surprising epidemiology pioneer. A contemporary of Pepys and Sibbald, Graunt was encouraged in his statistical work by the influential physician and administrator Sir William Petty. Graunt's book used pre-Great Plague data extracted from the London Bills of Mortality to report on public health matters like the numbers of people dying from epidemic diseases (Figure 2). Graunt, who showed a sophisticated understanding of statistical method, also produced an early life table.

The Library has a copy of the rare first edition of Hungarian physician Ignaz Semmelweis's classic explanation of puerperal fever (Figure 3). Semmelweis statistically documented and compared the occurrence of puerperal fever over the course of time in two different Viennese obstetric clinics and deduced that a 'particle' picked up during autopsies was responsible for the disease. Sir James Young Simpson was an early supporter of Semmelweis and praised his work in a paper in the *Monthly Journal of Medical Science*.

FIGURE 3 Ignaz Philipp Semmelweis. *Die Aetiologie, der Begriff und die Prophylaxis des Kindbettfiebers.* C.A. Hartleben, Pest, 1861.

Our copy of the book comes from the Simpson Collection and was probably sent to Sir James by Semmelweis himself.

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