# On the trail of the enigmatic Victorian microscope slide-maker "Greenpapers": a connection to Archibald Geikie's 1874 book *Geology*by Brian Stevenson, Kentucky, USA

This as-yet unidentified person produced large quantities of high-quality slides during the Victorian era. Multiple copies of the same subject are frequently encountered, indicating that he(?) was a professional preparer. Several types of specimens were frequently mounted, including parts of insects (but not whole insects), botanicals, and deep sea dredgings.

Papered slides from this mounter almost always have a generic-patterned gold-on-green top paper, leading to the maker often being referred to as "Greenpapers" (Figure 1). Many of Greenpapers' slides have handwritten specimen descriptions. Many of those same descriptions, on slides with the same green paper, are also seen on type-set labels. While the labels loosely resemble those used by R & J Beck, the borders are distinct and, most importantly, the Beck name is absent. While it is possible that Beck and Greenpapers used the same printer, there are no reasons to assume that they were professionally connected. Greenpapers' type-set labels are often found on unpapered slides. The same subject matter is often found on slides of all three types, such as illustrated in Figure 1B. Based upon the fashion trends of Victorian slide-making, Greenpapers' preparations probably progressed from papered slides with handwritten descriptions, to papered slides with type-set labels, and then to unpapered slides with type-set labels.

Another variant is occasionally seen, with papering and finish like Greenpapers', but with small type-set descriptive labels and a number (Figure 1A). Two variants are known, "Ooze from Atlantic Bed, 2,000 fathoms" (number 9), and "Grains of chalk prepared for microscope" (number 11). The descriptions and numbers correspond exactly with specimens sold to aid students of Archibald Geikie's Geology, from 1874 until at least 1910 (Figure 2). The description of slide number 9 corresponds with one of Greenpapers' common preparations, and a Greenpapers slide is known that bears an additional label with the number 9 (Figure 1B, rightmost slide).



**Figure 1. (A)** Microscope slides associated with Archibald Geikie's 'Geology'. **(B)** Three slides by Greenpapers, of the same material as the leftmost slide in 1A. Note that the rightmost slide carries an additional label with the number "9".

# LIST OF SPECIMENS to illustrate the GEOLOGY PRIMER.

Sedimentary Rocks See Primer, page	19
I. Conglomerate	21
2. Sandstone	9
3. Shale	22
4. Shale containing Plant-remains (portion of a Fossil-	
Fern)	44
5. Shale containing Animal-remains (Trilobites, &c.) .	47
Organic Rocks	56
I. FORMED OF PLANT-REMAINS	56
6. Peat	62
7. Coal, showing stratified structure	57
2. Sandstone       9         3. Shale       22         4. Shale containing Plant-remains (portion of a Fossil-Fern)       44         5. Shale containing Animal-remains (Trilobites, &c.)       47         ganic Rocks       56         I. FORMED OF PLANT-REMAINS       56         6. Peat       62         7. Coal, showing stratified structure       57         II. FORMED OF ANIMAL-REMAINS       66         8. Fresh-water Shell-marl       66         9. Ooze from bottom of Atlantic prepared for the microscope       68	
8. Fresh-water Shell-marl	66
9. Ooze from bottom of Atlantic prepared for the	
microscope	68
10. Chalk with Shell in it	69
11. Grains of Chalk prepared for microscope	12
12. Limestone containing Encrinites, &c	71

P/	GE
Fossils	49
I. PLANTS.	
13. Stigmaria, or Sigillaria  14. Lepidodendron Plants out of which coal has been partly formed.	61
14. Lepidodendron (formed.	
See also Nos. 4, 6, and 7.	
II. ANIMALS.	
15. Cup Coral )	
16. Piece of Encrinite Animals of which the re-	
stem   mains sometimes form thick	54
17. Spirifer, a marine masses of limestone.	
shell	
See also Nos. 5, 8, 9, 10, 11, and 12.	
Igneous Rocks	74
18. Granite	11
19. Mica } 20. Quartz Crystal Substances found in granite	11
21. Lava showing crystals and steam-holes	76
22. Volcanic Tuff	82
A small box containing the collection, price 10s. 6d., may obtained from JAMES R. GREGORY, 15, RUSSELL STRE	RT.
COVENT GARDEN, LONDON; or from MESSRS. MACMILLAN	

**Figure 2.** Two pages from the rear of the 1874 edition of Geikie's 'Geology', listing 22 specimens for sale from the London shop of James Gregory or through the publishers. Specimens 9 and 11 correspond with the microscope slides illustrated above in Figure 1A.

### JAMES R. GREGORY,

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# REMOVING IN DECEMBER 1874, TO 88, CHARLOTTE STREET, FITZROY SQUARE,

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COLLECTIONS OF MINERALS, FOSSILS, AND ROCKS, FOR STUDENTS, LECTURERS, COLLEGES, SCHOOLS, &C.

#### ELEMENTARY COLLECTIONS,

(Consisting of either Minerals, Fossils, or Rocks).

		•					£	s.	d.
50	Specime	ns, in poli	shed Cabine	t					
100	Do.		do.	(two trays) .			1	1	0
150	Do.		do.	(three trays)					
200	Do.		do.	(four trays) .					
300	Larger	Specimens	in Cabinet	(six drawers)					
400	Do.	•	do.	(eight drawer	8)		10	10	0
Colle	ections	of 100 ores	of metals, in	Cabinet, with t	hr	ee			
				re				3	0
25.8	pecimer	s of Miner	al fragments	for blowpipe t	ria	ls		2	6
50	Do.		do.	do.				5	0

English and Foreign Books on Geology and Mineralogy, Geological Hammers, Models of Crystals, Pocket-lenses, Blowpipes, Glass-topped Boxes, and all necessary articles for the study of these Sciences.

The Collection of Specimens to illustrate Professor Geikie's "Geology Primer" can be obtained of JAMES R. GREGORY, 15, Russell Street, Covent Garden, price 10s. 6d., and of Messrs. MACMILLAN, the publishers of the Primer.

**Figure 3.** An advertisement by James Gregory, from the rear of the 1874 edition of Geikie's 'Geology'. Gregory was a geologist, with no known interest in any of the other objects that were mounted by Greenpapers, such as botany or entomology.

Geikie was a university professor of geology, and so was unlikely to have also been a professional maker of plant or insect slides. The back of Geikie's book states that specimens, including two specimens for the microscope, can be obtained from the shop of James Gregory or the publishers Macmillan & Company, both of whom were located in London (Figure 2 and 3). This suggests that Greenpapers was also based in London. Gregory specialized in geological specimens, with no known connections to entomology or botany, and so was probably not Greenpapers. The editors who organized Geikie's book, and several other similar "primers", were Thomas Huxley, Henry Roscoe, and Balfour Stewart. Stewart was a physicist, and Roscoe was a chemist. Huxley was then Professor of Natural History at the Royal School of Mines and, among other things, member of the Quekett Microscopical Club (its president from 1877-1879). Of all the people affiliated with Geikie's book, Huxley was the most likely to have close associations with a professional microscope slide maker who also mounted non-

geological objects. Although it is not particularly likely that Greenpapers was Huxley, I feel that these slides give good reason to suspect that Greenpapers was an associate of Thomas Huxley.

This and other essays on the history of microscopy may be seen at the author's web site, http://microscopist.net

#### **Resources**

Geikie, Archibald (1874) *Science Primers: Geology*, second edition, edited by Thomas Huxley, Henry Roscoe, and Balfour Stewart, published by Macmillan and Co., London

Geikie, Archibald (1900) *Elementary Lessons in Physical Geography*, published by Macmillan and Co., London. The rear of the book includes an advertisement for *Primer of Geology*, which states that a "*Box of geological specimens to illustrate Geikie's Primer Of Geology*" was available for 10s. 6d.

Geikie, Archibald (1910) *The Teaching of Geography*, third edition, published by Macmillan and Co., London. The rear of the book includes an advertisement for *Primer of Geology*, which states that a "*Box of geological specimens to illustrate Geikie's Primer Of Geology*" was available for 10s. 6d.

Stevenson, Brian (accessed November, 2014) Unidentified Slide-maker "Green Papers", circa 1860-80, <a href="http://microscopist.net/GreenPapers.html">http://microscopist.net/GreenPapers.html</a>