

**As-bes/tus.** A fibrous mineral which may be split into threads and filaments and resists fire. It is also known as *amicanthus*, or earth-flax. The name indicates the substance, or rather the quality (in Greek, *asbestos*, —inextinguishable). It had many uses among the ancients. Mineralogically speaking, it is a variety of hornblende and pyroxene, and occurs in many parts of the world. It is found in great abundance in a few localities in the United States, and great attention is now directed to fitting it for the uses of the arts and manufactures.

The notices of its uses among the ancients are numerous. Herodotus refers to cloth made of it by the Egyptians. Its uses for paper, napkins, socks, drawers, handkerchiefs, are referred to by Varro, Strabo, and Pliny. Marco Polo mentions it, and Baptista Porta speaks of its being spun in Venice. Asbestos cements and wrappings for the bodies of the dead previous to incremation were in common use with those whose circumstances permitted it. Shrouds of asbestos of the time of the Roman Emperors have been discovered, and are in the museums of the Vatican and of Naples. The Romans dug their asbestos in Corsica; their mica in Spain.

Its modern uses are indicated in the following patents, and the enumeration is made at some length, as the subject has been but lately revived, and one interested can in no other way so readily reach the present state of the art, — to borrow the conventional phrase, which is as good as any other.

1. Safes, lining for : W. Marr, English, 1834.  
Hyatt, several patents, United States, 1869-70.
2. Lamp-wick : British patents :  
2071 of 1853. 145 of 1857.  
2647 of 1855. 1610 of 1863.  
Lord Cochrane, 1818.
3. Absorbent in lamps : Boyd, 1869.  
Beschke, 1866.  
in carburetors : Bassett, 1862.
4. Fire-brick and crucibles : Peters, 1862.  
English patent 2318 of 1862, asbestos, fire-clay, and graphite.  
Lewis, 1871. A covering of asbestos twisted into a rope and wound around a crucible.
5. Packing for hot-air engines : Lanbureau, 1859.  
for explosive engines : Drake, 1865.  
for steam - engines : Drake, 1865.  
combined with hair : Murphey, 1870.  
loose flock asbestos ; Hoke.
6. Boiler covering : Peters, 1862.  
Hardy, 1869. Selden and Kidd, 1865.  
Murphy, 1870. Spencer, 1868.  
Riley, 1871. French, 1869.  
Murfey, 1870.
7. For forming a radiating surface, as in gas-stoves, fire-grates, and broilers.
8. In porcelain manufactures, of teeth especially, placed on the side of a muffle to isolate the biscuit from the slide, to prevent its becoming attached thereto in the process of baking.
9. As an anti-friction composition for journal-bearings, pistons, etc.  
British patent, 2048 of 1858. Devlin, 1860.  
Peters, 1862. Devlin, 1865.  
Botticher : with soapstone and cotton, 1864.  
Kelly : with graphite and iron-filings, 1870.  
Johns : with caoutchouc, 1868.
10. For molded articles : Whitmarsh, 1868.
11. For roofing cement : Johns, 1868.  
Kidwell, 1868. Moore, 1868.
12. Flooring cement : Whitmarsh, 1867.
13. Electric insulator : English patent, 362 of 1865.
14. In refrigerators : Hyatt, 1870.
15. In ink : Smilie, 1863.
16. For paper : English patent, 1413 of 1853.  
Johns, 1868. Schaeffer on Paper, an old German book, describes asbestos paper, and contains a specimen.
17. For coffins — mixed with clay : 1870.
18. For ropes strengthened with other materials, Stevens, 1870 and 1871.
19. For yarn : separated into filaments by alkaline treatment, and then treated like wool :  
Rosenthal's patent, 1872.