



34, Dover Street.
London, W.1.

1st April, 1938.

The Secretary,
Messrs. Rockbestos Securities Co.
100, Broadway,
New York,
U.S.A.

Dear Sir,

I am sending you herewith a copy of the READERS DIGEST, April-1938, and would draw your particular attention, and also that of your Directors, to the article on Page 106, entitled "Weaving the Sands of the Sea".

It would appear that it will be necessary for you to consider how this might affect our business. and I should be glad to know if you are experiencing any competition from this direction.

I am,

Yours faithfully,

T. Broomfield

RBB 01014

SC-ELEC-00720

Readers Digest

[illegible]

1/2 in. En. Bricks

Recent Non-Fiction Literature in the Field of
 as Edited by the Publishers' World's

[illegible]

Figure 3. The effect of the concentration of the polymer on the α -transition temperature of the polymer.

[illegible]

¶ Glass fabrics that are soft as cotton,
sheer as silk or tough as canvas

Weaving the Sands of the Sea

Condensed from Nation's Business

Edward Brecher and Philip Dunaway

"ALL THINGS may be woven," wrote Dante, "even the sands of the sea." Today glass-makers are weaving tons of sand — sand made into almost invisible threads of glass from which are spun lustrous yarns for fire-resistant textiles and electrical insulation. They are producing fabrics soft as cotton, sheer as silk, tough as canvas. This new fibrous glass may be cut, sewn, woven or knitted — it is industry's newest basic material.

As early as 1892 an American glass company tailored a dress of silk fabric interwoven with strands of glass thread, and exhibited it at the Columbian Exposition. Since then glass-dress stories have popped up from Paris, Hollywood, and points between. But today glass fiber has become a staple of commerce.

Even a 14th-century Venetian could produce glass fiber, but he couldn't draw it one-twentieth as fine as a human hair, nor could he manufacture enough of it daily, as Corning Glass Works does, to reach the sun, and enough more, as does Owens-Illinois, to reach back.

The modern process begins with

small glass marbles, exactly like those you played with as a boy. These are fed, one at a time, into a trim electric furnace no bigger than a kitchen stove. High-pressure steam blowers force the molten glass through 102 tiny holes in a plate that forms part of the furnace floor, producing foot-long, cottonlike glass fibers which are gathered by mechanical fingers and twisted into yarn. Wound on spindles, the yarn is processed into cloth by regular textile machinery.

The same kind of furnace also produces continuous fibers, with a 10,000-mile unbroken strand no novelty. It is hard to believe that each quarter-ounce marble will yield nearly a mile of thread of 102 filaments. To do this no blowers are needed; the attendant simply grasps the filaments as they worm their way through the perforated plate, fastens them to a revolving drum which pulls them out — drawing some 60 miles of fiber a minute. A single twist makes a soft strand; half a dozen a strong, tough thread. Though glass fabric won't take a dye, tinted glass marbles may be used in the furnace to produce yarns of different colors.

With the textile field at present highly competitive, glass fibers thus far are mostly used for two special purposes — as chemical filters and as electrical insulation. As the former, glass resists most acids and withstands temperatures even four times as high as can ordinary cloth. Also, glass cloth filters last weeks instead of days, and are used in places where no filter has ever served before.

Even more startling is glass fiber's success in electrical insulation. It not only insulates but is fire-resistant, vermin-proof and highly flexible. There is no reason why all electrical wires should not be wrapped in glass. Then, too, glass can be used in layers so thin that a five-horsepower electric motor, glass insulated, takes up no more space than present motors of half that power. Indeed, glass may become as universal an insulator as copper is a conductor.

Glass men are not ready to push the idea of glass clothing, but they do see possibilities of dining off glass tablecloths and living among glass

curtains and awnings. You'll see them first on ships and in theaters, where fire means catastrophe; later, in public dining rooms where there will be no more cigarette holes in table "linen." Architects envision thin, almost filmy nets of close-woven glass applied over colorful wallpaper, reflecting light into darkest corners and permitting color from the paper underneath to shine through in pastel patterns.

Unprocessed glass fiber — produced in huge furnaces — is being used in carload lots as "glass wool" for insulating buildings, railroad cars, automobiles, refrigerators and all types of furnaces. Germany is using it extensively as heat insulation in her new process of extracting gasoline from coal on a large scale. Previously she had imported asbestos for this purpose. But shortly, using American machinery in her glass-wool factories, she will be freed of the need of importing asbestos and possibly certain other raw materials. Even the poorest of have-not nations has sand.

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Place Names of Character — II —

Sugar, Idaho	Gallant, Alabama
Hominy, Oklahoma	Spry, Utah
Toast, North Carolina	Alert, Indiana
Tomato, Arkansas	Erect, North Carolina
Cucumber, West Virginia	Gay, Michigan
Tea, South Dakota	Chic, Tennessee
Coffee, California	Beauty, Kentucky
Cocoa, Florida	Handsom, Virginia
Pie, West Virginia	Slick, Oklahoma