Venture: Purify water with the fiber that made men whistle.

Nylon. Reverse osmosis.

A fiber that started making girls' legs more beautiful some 30 years ago.

And a process that's been around a lot longer.

But when Du Pont scientists and engineers look at them in a new way, they combine into an idea that can change the world.

Reverse osmosis is a purification process that requires no phase change. It's potentially the cheapest way to desalinate water.

Du Pont's innovation? Hollow, semipermeable nylon fibers much finer than human hair. Symmetrical, with an outer diameter of .002 inch and a wall thickness of .0005 inch, with an accuracy of manufacture maintained at close to 100%. Twenty-five to 30 million of them encased in a precisely engineered unit 14 inches in diameter by 7 feet long.

The result: a semipermeable surface area of about 85,000 square feet—the size of a 2-acre lot—and up to 10,000 gallons of desalted water per day.

So far "Permasep"® permeators have been used experimentally to purify brackish and polluted water, and in various industrial separations. But the potential to desalt seawater, too, is there.

So Du Pont scientists and engineers are even now working toward improved fibers, units and plant designs that should make it possible to get fresh water from salt at a price that any town or nation can afford.

Innovation—applying the known to discover the unknown, inventing new materials and putting them to work, using research and engineering to create the ideas and products of the future—this is the venture Du Pont people are now engaged in.

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Ventures for better living.