

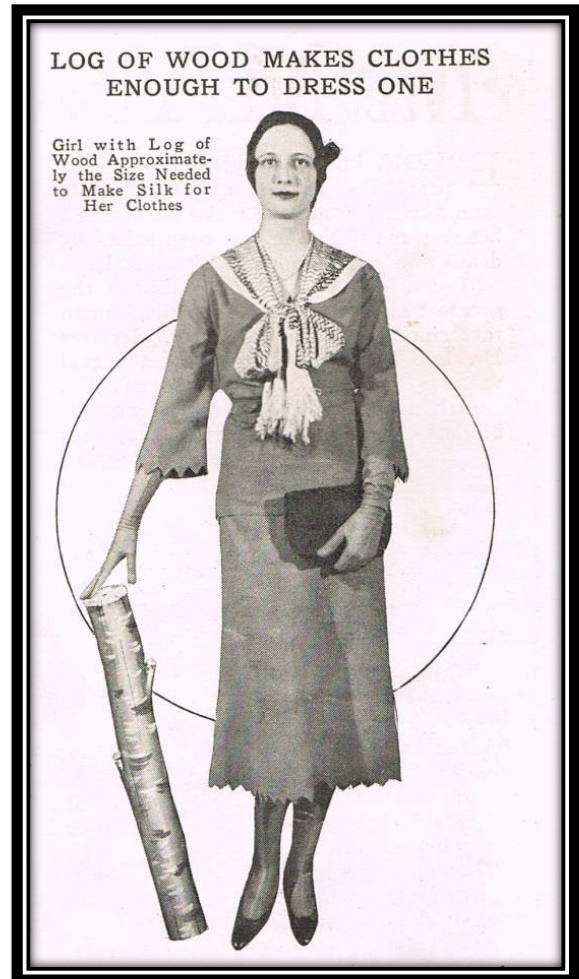
# Are You a Wood Nymph?

## Rayon, the New Fabric of the Model A Era

By Peggy Gill

During the model A years of 1928-1931, rayon was a relatively new fabric that was gaining popularity in the fashion industry primarily due to its look, feel, and versatility in garments. In its infancy, rayon was often referred to as “artificial silk,” but it was, in fact, the very first man-made fiber. Unlike modern nylon and polyester which are petroleum based products, rayon is made from natural plant material, primarily wood pulp, so it is considered a semi-synthetic fiber.

In December of 1931, an article found in Popular Mechanics Magazine stated that the question had recently arisen as to “just how much wood a woman carries when fully dressed.” This led to calculations by textile experts of the time to show that the average-sized woman requires a log approximately the size of the one shown in the illustration to the right.<sup>i</sup>



## But what exactly is rayon, and how is it made?



A device for spinning Viscose Rayon dating from 1901

Rayon is a versatile fiber that has the same comfort properties as other natural fibers. It is made from purified cellulose, which is the primary component of the cell walls in green plants. In the case of rayon, wood is usually the main ingredient. The cellulose is chemically converted into a soluble compound and then this solution is dissolved and forced through a “spinneret to produce filaments which are chemically solidified, resulting in synthetic fibers of nearly pure cellulose.”<sup>ii</sup> The fibers themselves are soft, smooth, and highly absorbent which allows them to easily absorb

colors when dyed, and also makes them particularly useful for hot and humid climates. Their texture, when woven into a fabric, imitate the feel and texture of silk, wool, cotton,

and linen and today are used in garments that range from delicate lingerie to heavy winter coats.<sup>iii</sup>

The history of rayon dates back to 1855 when Georges Audemars, a Swiss chemist, dipped a needle into liquid mulberry bark pulp and gummy rubber to make threads that could be then woven into cloth. This method, however, was too slow and time consuming to be practical.

Thirty years later, French chemist, Hilaire de Charbonnet, patented an artificial silk that was a cellulose-based fabric. Fortunately, this fabric was removed from the market due to its high flammability properties. Nevertheless, Charbonnet is credited with being the father of the rayon industry.

Shortly after Charbonnet's development, in 1894, three British inventors, Charles Cross, Edward Bevan, and Clayton Beadle developed and patented a safe and practical method of producing this artificial silk cloth that came to be known as viscose rayon.<sup>iv</sup> Their system did not require purified wood pulp cellulose, which made it cheaper and easier to produce. Their process, which takes multiple steps, allows for modifications to be made to the fiber as it is being produced and the finished textile can be soft and silky or sturdy and strong. It can have a dull or bright finish, and can be silken, linen-like or even wool-like. Specific types of rayon available today include viscose, modal and lyocell; the difference between them is in the manufacturing process and the properties of the finished product. Nevertheless, even to this day, the viscose method has been the principal method used to make rayon.

Rayon continues to be a popular fiber in the clothing and textile industry today. So the next time you are out enjoying the shaded coolness beneath the trees, take a moment to imagine just how much wood you may be wearing.

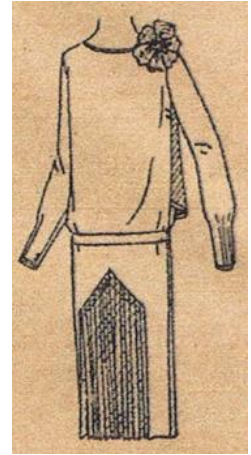
On a side note...



### **For the Seamstress: Using Rayon Fabric in Reproduction Garments**

For those of you interested in era fashions, be sure to take into account your pattern when choosing to work with rayon fabric. In researching the attributes of this fabric, many experts stated that in addition to the soft, smooth, and absorbent properties that make this fabric so desirable for garment construction, it also has a wonderful draping quality. This is a plus for those styles that flow and fall from the shoulders and hips. However, rayon *does not* hold pleats well, something I read about in my research about two weeks too late.

I discovered this firsthand as I was making a 1929 style dress from a beautiful orchid colored rayon crepe using an original pattern. The front of the dress has a chevron shaped ½” pleated inset in the skirt front. This was difficult to initially block the pleats, and I had to hand baste each pleat the entire length of the inset. I must have spent a good three hours pleating, basting, and ironing in the pleats. Completing the dress, I wore it to an event, and had multiple compliments on catching the look and style of the model A era. However, it was hot that day, so after the event, I washed the dress in cold, on gentle cycle. To my dismay, the pleating washed completely out!



So what I thought would be an easy care, wash and wear dress for era image, instead has turned into an ironing challenge each and every time I wear it.

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<sup>i</sup> *Popular Mechanics Magazine*, December 1931, Vol. 56, No. 6, p. 905.

<sup>ii</sup> [En.wikipedia.org/wiki/rayon](http://en.wikipedia.org/wiki/rayon). March 5, 2014.

<sup>iii</sup> Karen L. LaBut and Carol J. Salusso (2003). *Classifications & Analysis of Textiles: A Handbook*. Univeristy of Minnesota.

<sup>iv</sup> Amerian Fiber Manufacturer’s Assn., Inc. ([www.fibersource.com/f-tutor/history.htm](http://www.fibersource.com/f-tutor/history.htm)), March 7, 2014.