

IT'S BEEN ESTIMATED that on any given day, at least half the global population is wearing jeans. Ubiquitous now, the wardrobe essential was born exactly 150 years ago as a solution to a very specific problem: Miners in the American West needed stronger workwear to withstand the wear and tear of their tough jobs. Two San Francisco–based Jewish immigrants, Levi Strauss and Jacob Davis, rose to the challenge. In 1873, they designed a pair of sturdy denim pants that had special copper rivets to reinforce the pockets for added durability and were awarded a patent for their innovation. Today, the world knows them as Levi's 501 jeans.

Levi Strauss & Co. would go on to become the world's biggest denim brand, with the 501 part of the firmament of fashion. Neither too skinny nor too wide and almost brazenly high-waisted, they are that rare fashion item that manages to appeal to the TikTok-addicted Gen Z teen and the most discerning fashion editor. On the short-form video platform, the hashtag #vintagelevis has more than 85 million views. You'll find clips of teens enthusing over how great the jeans make their butts look. Stylists, industry folk, and hardcore denimheads hunt for and collect 501s, rhapsodizing about the details and quirks of different vintages the way wine enthusiasts obsess over Bordeaux–like the vaunted "Big E" selvage 501s produced before 1971, where the Levi's branding on the signature Red Tab is in all caps.

Jane Herman, a designer and author of a Substack dedicated exclusively to denim, Jane on Jeans, has more than a dozen pairs of 501s. Her current favorite is a baggier pair she bought a few sizes up when she was pregnant. "Today, with looser legs being the look, they don't feel nearly as big as they did when I bought them," says Herman. "That's the thing about 501s: They sort of adapt to trends and what we need from our jeans at all the different moments of our lives."

The remarkable staying power and current popularity of the 501 is something that Strauss and Davis likely never envisioned. The style is an enduring emblem of youth, creativity, and rebellion and a canvas for self-expression. Fran Lebowitz wears her 501s with oversize blazers and button-ups. Gigi Hadid opts for baby tees. Rihanna has made them a mainstay of her maternity wardrobe, styling them unbuttoned with everything from a diamond bra

From top: A garment worker at Levi's San
Francisco factory, 1940s; Fran Lebowitz, Gigi
Hadid, and Rihanna wearing 501s; Plant-Based
501s featuring a Nature Fiber Welding patch
made from cork powder, coconut husks, and
rubber; a Tennessee farm where Stony Creek
Colors sources natural indigo; Nature
Coatings pigment made from wood waste

to a cropped monster-truck T-shirt.

The 501 remains Levi's best-selling fit of all time, helping to propel the company last year to net revenues of more than \$6 billion. But manufacturing jeans at that massive scale can come at a steep ecological cost. That's at least part of the reason why Levi's is using the occasion of the 501's 150th birthday as an opportunity to look ahead toward a cleaner, greener future.

Over the past decade, Levi's has taken steps to mitigate the energy, chemicals, waste, and environmental harm involved in making jeans. These have included employing production processes that use less water; buying, repairing, and selling vintage Levi's to keep them in circulation; and joining the Organic Cotton Accelerator, an organization working to boost the supply of cotton grown using pesticide-free cultivation methods. And a big leap forward arrives this July with the release of the new Plant-Based 501, made from 97 percent renewable resources.

Roughly 10 percent of a pair of 501s by weight has been traditionally derived from petroleum, from the polyester-thread stitching on the back pocket to the carbon black ink used to print Levi's famous certificate of authenticity and the cellulose-and-acrylic Two Horse patch. By contrast, the Plant-Based 501 uses organic-cotton thread, and Levi's has collaborated with a range of U.S. biomaterials companies to create components that significantly reduce the petroleum percentage. Nature Coatings in L.A. supplies BioBlack TX pigment, made from wood waste, and Natural Fiber Welding in Peoria, Illinois, creates Two Horse patches out of Mirum, a leatherlike material made from cork powder, coconut husks, and rubber. Also, natural-dye manufacturer Stony Creek Colors of Springfield, Tennessee, contributes dye made from indigo that was grown by farmers who are transitioning out of tobacco production, replacing the synthetic indigo typically used to dye jeans.

Plant-Based 501s are going to become a permanent offering, and there are plans to extend and expand the operations and practices involved across the company. "We're making good future vintage," says Paul Dillinger, Levi's head of global innovation, who works with the brand's Eureka Innovation Lab. "It's gonna be the same old friend that you keep around for years. You're not gonna know we spent years on R&D. You'll just know it's your favorite jean." HB