Fabric Research Paper

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The Versatility of Canvas

The fabric type that I chose to research about is canvas. Canvas is a very versatile fabric, which is why it stuck out to me specifically. Canvas can be used for bags, work pants, heavy-duty jackets, tents, sails, and even paintings and artwork. It's often seen used by high-end fashion designers in their latest garments or accessories, but is also heavily prevalent in everyday, durable work-wear generally consumed by the middle and lower classes. It can be used for highly durable outdoors equipment like sails and tents, yet is a common backdrop for an artist's medium as well. The construction of canvas in all of those scenarios can differ, but is canvas at its core. Exploring the different uses and compositions of canvas fabric provides deeper information on the extent of canvas's durability, and why it has grown to be a desirable material choice for many industries.

Canvas is typically a plain weave fabric made from 100% cotton. Canvas can be made from linen as well, but is done so less frequently. Cotton is one of the few completely natural fibers, and is highly sustainable. Cotton is the "second most commonly used fiber," and accounts for 27% of fiber consumption (Marcketti and Karpova). Many fibers and materials used in today's garments and clothing come from synthetic fibers, which are less sustainable to produce and to manufacture into fabric, as resources are depleted and workers are exposed to harsh working conditions (Marcketti and Karpova). Cotton, along with wool from sheep and cashmere from goats, is one of the few naturally occurring fibers. It is grown and harvested, then is spun into yarn.

Canvas is made by tightly weaving thick, medium to heavy weight yarns together in a plain weave. Cotton yarn is generally dyed a lighter color when woven for canvas (Bendure). Cotton canvas is generally made with two-ply yarns, which add "weight, texture, and creates an even thickness throughout the fabric" (Jacobs). "The warp (vertical) threads are held steady on the loom, while the weft threads cross over and under each warp" (Jacobs). Canvas's unique thread weight and the plain-weave technique used allow it to stand out from other cotton fabrics.

Before canvas was made with cotton or linen, it was woven with hemp. The word canvas is derived from the Latin word "cannabis," which means "made from hemp" (Jacobs). Around 1500 BC, ancient Indian people began weaving cotton into canvas, and trade resulted in cotton canvas production to spread into Europe. It was specifically seen in France in lingerie, aprons, costumes, and curtains (Bendure). Other European countries, such as Spain and Italy, used cotton canvas for sails of ships, and it was brought to North America. It became popular for the use of paintings, and has been used by artists for centuries. Cotton is grown in 70 countries around the world and is continually used for producing materials like canvas (Marcketti and Karpova).

Cotton is a highly versatile and durable fabric, which makes it desirable for use in many industries. However, it does have characteristics that aren't desirable in certain circumstances. Canvas has a rough-hand, so it isn't an effective choice in products or clothing that necessitate softness. It is not chemically resilient, since it's derived from cotton, a natural fiber. It's hydrophilic, which means it absorbs water and would not be weather resistant or waterproof. Cotton canvas has many desirable qualities, but it is important to differentiate what qualities are needed before choosing a material or fabric for a product. Overall, the sturdiness, strength, and versatility of canvas make it a highly desirable fabric and allow it to have many practical uses for different industries.

Works Cited

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