

Correspondence.

"The Mechanical Color Tests."

To the Editor of the SCIENTIFIC AMERICAN:

Having read with special interest the recent articles which have appeared in your columns regarding "The Mechanical Color Tests," and noting the fact that my name has been used in connection with them, I venture to ask that you will allow me space for a very brief explanation of my relation to the subject. Owing to my connection with the kindergarten since its earliest introduction in this country, my attention was called, many years ago, to the utter lack of any logical system of color instruction, and for a long time I gave this subject much thought without discovering the means for any radical improvement.

As early, however, as 1885 I had arrived at the conclusion that, owing to the fugitive qualities of pigmentary colors and the indefiniteness of their commercial names, the solar spectrum affords the only source from which to derive unchangeable standards of color; also that the Maxwell disks furnish the only practical means for measuring color effects produced by material substances, and that from these two sources a practical color nomenclature was possible.

Following out these ideas by continued practical demonstrations with the aid of many friends in the educational field, we selected, in 1888-89, six locations in the solar spectrum best adapted, in our opinion, to supply these standards. We also prepared Maxwell disks in the closest possible pigmentary imitation of these six standards and black and white, thereby rendering possible a nomenclature of colors. A little later these spectrum standards, which had been chosen æsthetically by competent colorists, were located by their wave lengths by a professional scientist.

This scheme of color instruction was definitely formulated and carefully explained at considerable length in a book published and copyrighted in 1890, called "Color in the Schoolroom." This book outlines a practical system of color instruction based on spectrum standards æsthetically selected and scientifically located. When the purest possible pigmentary imitations of these spectrum standards were applied to the Maxwell disks and rotated on a color wheel or color top, they furnished the first practical nomenclature for material colors ever put in use. After a test of five years this nomenclature has proved of such educational value as to gain the approval of a very large number of the leading educators and art teachers of the country.

Since 1890 this system of color teaching has been greatly improved, having been kept constantly before the public in the scientific and educational papers, by means of numerous addresses to teachers, normal schools and colleges, and in two other books which the writer has published since the one mentioned above. Springfield, Mass. MILTON BRADLEY.

An Answer to Strindberg.

To the Editor of the SCIENTIFIC AMERICAN:

In the March 23 number of your valuable paper I noticed an article by Strindberg on the "Inferiority of Woman." If the editor will permit, I would like to make reply to that article through your journal.

The first sentence under the above heading is this: "Woman is inferior to man." He goes on to prove this statement by saying, "The author of 'Pere' does not arrive at this conclusion by an exclusive analysis of woman's mental qualities; to a great extent he relies upon her structural and anatomical weaknesses."

In the second chapter of Genesis, seventh verse, we read: "And the Lord God formed man of the dust of the ground." In the same chapter, twenty-first and twenty-second verses, we read: "And the Lord caused a deep sleep to fall upon Adam, and he slept, and he took one of his ribs, and closed up the flesh instead thereof, and the rib, which the Lord God had taken from man, made he a woman." He speaks of the gray matter of the brain not being so dense in the female as in the male. Yet, in the next sentence admits that her nerves are much stronger, nine pairs of much stronger nerves in the female than in the male emanating from this inferior brain of the female. The author of that article evidently traces his origin to the inferior animal. How much rather would I believe the second chapter of Genesis and meditate upon my origin as from God. This inferior little body of mine being framed by God from the bone or rib of this superior being spoken of, man. Yet Adam, when woman was brought unto him, said: "This is now bone of my bone, and flesh of my flesh."

Man, with his superior strength and muscles (which we admit), has not the nerve or courage to endure suffering. As we attribute largely man's superior strength and the developed muscles to the difference of duties or occupation of men, so do we attribute to woman a greater capacity to endure pain; simply because God made woman to bear and nurture the race. In the burial places of the stone and iron ages

the writer claims skulls were found of two different kinds. He says it is opined that the inferior skulls were those of the female; the superior, those of the male. It is as reasonable to suppose that the inferior were those of the male, and the superior those of the female.

And again it is just as reasonable to suppose that hundreds of years hence his own skull may be exhumed and declared to be that of a female.

One of the motives given by the author which causes so many men in the present day to deny the inferiority of woman is "a feeling for woman which inspires adoration much as religion does."

This intense tenderness and veneration for woman is God-given. He loves, and respects, and reverences her because God so planned and formed her his equal and companion. Another motive given by some, he says, to deny her inferiority is "the idea that a quantity of masculine vices are not found in woman," but adds, "She has other and greater ones of her own." True, in the garden of Eden, woman used the superior nerve spoken of by the author, and tempted Adam to sin. While Adam's inferior will power yielded to the machinations of woman, and he disobeyed the commands of God.

"The so-called higher qualities of woman do not bear a very searching analysis. Her impressionability, of which we hear much, is merely that of a child. Her hysterical and passionate outbursts when thwarted are the true equivalents of a child's screams and kicks, when it is refused something it wants."

Really, we consider this the most irrational and unintelligent survey into the character and disposition of woman that could possibly be made. The writer could not possibly use such language regarding one who has assumed the title of mother. Analyze, if you please, the devotion of a mother, a Christian mother, to the child she loves and cherishes more dearly than her own life. Search and analyze, if you have the ability, the so-called higher qualities, love, fidelity, fortitude, self-denial, of your own (perhaps Christian) mother, over the same "higher qualities" of your father. These mothers who rock the cradle possess the intelligence to rule the world. "No woman can make a good cup of coffee!" The author then states the reasons. To this I make no further response than this: If she cannot, content yourself to rise early and make your own superior cup of coffee before your loved, though inferior, companion has arisen from her slumbers.

"Crime, even, demonstrates feminine inferiority, for there is generally no reflection or calculation of the probability of discovery in crimes committed by women." As statistics show a larger percentage of male criminals, his own statements argue for instead of against her; morally man must be inferior. Crime is usually a rash act, not premeditated; and the murderer who plans, and plots, and reflects, and calculates as to the results of certain deeds is usually a worse man, and morally an inferior man, to the one who commits a crime in a passion and repents the deed. We note again the author simply expresses his disbelief in the historical record of the great queens, such as Elizabeth of England, whose works he claims have been magnified. He offers nothing to substantiate his opinion. He goes on to reaffirm that woman is merely the complement of man. "As his alter ego she may be invaluable, but alone she is useless."

Here he has simply reversed God's plans. First, God made man, not woman, and he said it is not good that man should be alone. Afterward he made woman. As his alter ego she may be invaluable, but, without woman, man was found to be useless.

"The complete success of the emancipation movement would mean a struggle against the laws of nature." "What [asks Strindberg] is the cause of this unreasoning fury against man? For is it not he who after all has bestowed upon woman the benefits of culture, the right of holding property and other privileges?" The laws of nature are in the hands of God. These are not what we wish to change. It is the alterable laws of countries, made by man, we are attacking. The unreasoning fury against man spoken of is imaginary, not real. Woman still loves man, her family, her home, and seeks to protect it, but is rebellious as to her subjugation to certain laws made by man giving to him rights and privileges he is not willing she shall equally share. You say man bestows the right to woman of holding property and other privileges. The other privileges spoken of are no doubt paying the tax required by the laws without representation. "A bad feature of modern legislation is its tendency to rob the wage earner and father of the family of his daily bread in order to benefit the emancipated female, generally childless." Shame on such an assertion. You make a thorough canvass of our cities, the shops, the factories, the stores, the many places where women are employed, saying nothing of the thousands of hovels in which women are found bending over wash tubs, sewing machines, etc., and ask why they thus labor from morn till night. The larger percentage of these women will answer to support father, mother, children, or, perhaps, husband. Why? Because the fathers or hus-

bands have neglected to properly provide for them. Again, why? Because of some of the bad features of modern legislation. While it has given to man a liberal recompense for his services, it has allowed to remain evils that drag down not only the man, but woman. Hence her desire for emancipation and equality. "Necessarily, there must be some sacrifices, and it is against these that the crowd of so-called emancipated women, who are devoid of any feeling of duty toward humanity, raise their raucous voice."

Yes, there must be sacrifices. Every mother in the universe knows that. Yet these are God-given pleasures with ample rewards. No! No! No! I am a mother and deem it a sacred duty to have children given me to teach and train, not only for time, but for eternity. And we are not devoid of duty toward humanity. For ours is a love that reaches beyond our own fireside. We are ready and willing as wives and mothers to rock the cradle. But the day has come when woman can no longer be kept beneath her equal. Through education are we enlightened. Possibly France has not yet arrived at the place where she is ready to accept or concede woman the equal of man. But America, the republic of the world, is saying in many of her States, and the echo is sounding through her national capitol:

"Woman! Woman! God bless her noble nature and generous spirit." And as the echo rolls from State to State all over America, we hear again and again the repetition sounding in senate chamber and legislative hall, "Welcome, noble woman."

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Platinum.

The Ural platinum deposits in Russia are the only ones in the world, as this metal is worked nowhere else, and is known simply as a mineral finely disseminated in certain rocks. Platinum occurs in the Ural government of Perm, where it is found on various private properties and state lands. In the district of Goroblagodat there are 70 allotments for the exploitation of platinum under different private individuals. The metal is found in the form of alluvial deposits or platinum-bearing sands, which frequently also contain gold. These deposits vary in thickness; they are rarely less than three and often reach seven feet; the grains are usually small in size, but occasionally small nuggets are found weighing one or more kilogrammes. The platinum is frequently accompanied by other rare metals, such as iridium and osmium. At present all the platinum extracted in the Urals is forwarded in the crude state to St. Petersburg, whence it is sent abroad. Although there are two laboratories in the Russian capital for refining platinum ore, the greater quantity is sent abroad in the crude state. The production is subject to a tax of 3 per cent for leasehold and 4 per cent for freehold works. The rapid and variable fluctuations in the price of a product having no definitely fixed exchange value, but indispensable to the arts, reflect upon the production of platinum in Russia. Thus, when the price of the metal is high, it becomes profitable to work the poorer deposits, while it is only possible to work the very richest when the price is low. Although the first platinum deposits in Russia were discovered so far back as 1819, the actual exploitation of this metal began only in 1824, when rich veins were discovered in the Nizhni-Tagilsk district. From 1828 to 1845 platinum money was coined in Russia. The denomination of these coins was three, six and twelve rubles; the total value of platinum money put into circulation was 4,250,000 rubles. During this period the production of platinum increased considerably, but when platinum coinage ceased the exploitation of the metal was almost entirely stopped, and only revived in 1859. In 1887 the production of pure platinum was 269 poods 4 pounds, in 1890 it was 173 poods 26¼ pounds. The value of the yearly export of platinum, which goes chiefly to England, is about 1,560,000 rubles. The largest quantity of platinum is now extracted at the deposits of Nizhni-Tagilsk, belonging to Prince Demidoff San Donato, and at the Krestovodvigensk deposits of Count Schouvaloff. In 1890 there were 6,000 workmen employed in the exploitation of platinum.—Petersen's Trade Review.

The New Mauser Repeating Rifle.

The new Mauser repeating rifle was exhibited at Fort McHenry, Maryland, on April 1, by Captain Markselaeger, of the steamship La Campine. The new gun is one of the first made for the German government. It is something like the Krag-Jorgensen military rifle which is now being adopted in the United States Army. It is of 32 caliber and the construction is on the same principle as the Krupp gun, the barrel being of three tubes, one inside the other. The inner tube is made of hard tempered steel and is rifled. The bullet is propelled by a smokeless powder. Fired at the height of the shoulder, the bullet, it is said, will go nearly two miles before becoming spent, and at 2,000 yards it will pierce the bodies of seven men placed one behind the other.