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Contents.

(Illustrated articles are marked with an asterisk.)

Table listing various articles such as Academies, government, Agriculture, inventions, and others with corresponding page numbers.

TABLE OF CONTENTS OF THE SCIENTIFIC AMERICAN SUPPLEMENT No. 846,

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THE WAR IN EGYPT.

The prospect of a speedy termination of the Egyptian difficulty does not improve. Indeed, it looks now as though England has on hand a serious war which is not likely to be brief, even if no general European complication arises from it.

Meantime the industries of Egypt are grievously deranged; trade is at a stand-still, all manufacturing operations are suspended, and agriculture is largely interrupted.

The geographical and the social characteristics of Egypt are peculiar, and of such a nature that war affects the country far more disastrously than would be possible in any other land.

The Europeans who have been driven out furnished most of the capital for all commercial and industrial enterprises, filled most of the positions requiring scientific knowledge or mechanical skill, and controlled the majority of the means for making productive and profitable the labor of the native masses. In their absence a speedy revival of prosperity is impossible, even if the war should end at once.

Within the past twenty years the agricultural products of Egypt have been nearly trebled by means of the capital and machinery introduced from Europe. The irrigation and consequent cultivation of vast areas of sugar and cotton and corn land have been made possible by the introduction of steam pumps and other modern irrigation machinery. Were the natives able to operate such machinery they can not now do so for lack of coal, and so to a serious extent they cannot produce the crops on which their prosperity depends.

The cotton-ginning factories and steam-presses, by means of which the cotton crop of Egypt has been made fit for profitable exportation, were introduced by Europeans and largely operated by them. The same is true of the sugar mills and the railways and other means of rapid and economical transportation. The natives themselves are incapable of operating the railways or of conducting an export trade, were such trade possible in Egypt in time of war. As a consequence the gathered crops are lying in the interior unsold; cultivation is largely suspended, and thousands of native workpeople are threatened with starvation.

The commercial and industrial arrangements incident to the war are not confined to Egypt. Even if no harm befalls the Suez Canal, and there is no suspension of traffic through it, England cannot but suffer severely, though indirectly, in her commercial and manufacturing interests.

Fully two-thirds of the cotton crop of Egypt, averaging 280,000,000 pounds, has hitherto gone to England. In the Bolton district alone five million spindles are employed on Egyptian cotton; and in the whole of England some twenty-five thousand workpeople are employed upon this staple. The stoppage of the supply cannot but affect them disastrously.

The large dependence of English industry upon Egyptian products is further illustrated in the case of cotton-seed, about nine million dollars worth of which is imported annually. Last year Hull alone took 120,000 tons, and in its crushing twenty-five hundred men and boys were employed. Still more serious will be the effect of the stoppage of the supply of Egyptian cotton seed upon English agriculturists, who depend very largely upon cotton-seed oil-cake for feeding their cattle. The English soap-boilers use about fifty thousand tons of Egyptian cotton-seed oil a year, and must likewise severely feel a cutting off of the supply from that region. England also draws from Egypt annually six or seven million dollars worth of wheat and beans, three million dollars worth of sugar, and more than two million dollars worth of wool, ivory, gums, and other native products.

In return for all these, Egypt has taken manufactured goods, machinery, coal, and cotton fabrics, the producers of which cannot but lose heavily by the ruin which has fallen upon Egypt.

How far these English losses will react upon American trade it is impossible to foresee. The deficiency in cotton and corn can be made good from this side, but it is doubtful if any marked advantage will accrue to American producers unless the war should involve other powers than Egypt and Great Britain.

The first effect anticipated by our shipping merchants is an advance on ocean freight and in marine insurance through the withdrawal of first-class steamers for transport service to the seat of war, and the substitution for them of second and third-class freighters in the regular carrying trade.

A RECENT AURORA.

There was a superb exhibition of auroral light on the night of the 4th of August. We do not know how far over the country it extended, but from an elevated locality among the Connecticut hills the celestial show was beautiful in the extreme. The display commenced about 9 o'clock, when the whole northern sky was illuminated with a light of surpassing softness, singularly colorless and serene in aspect, like the breaking of the dawn on a summer morning, or the silvery light that attends the rising of the summer full moon.

The quiet phase was of short duration. The arch of white light widened and broadened, encroaching on the east and west, and touching the south with delicately penciled rays. The coloring took on bluish and greenish tints. Streams of light darted from the north, north-west, and north-east, reaching to the zenith, and dimming the luster of the bright stars, upon whose domains they ruthlessly intruded. Two

brilliant streamers met above Arcturus, surrounding the ruddy star with a transitory corona; others threw their ethereal beams over the Great Dipper, the Polar Star, and Cassiopea, immersing them in a hazy light, through which the stars glimmered and twinkled in subdued brightness. The lesser stars ceased to shine amid the all-pervading glow, and a portion of the Milky Way, grandly defined in the earlier evening, was completely hidden from view.

The scene changed with every glance to the heavens. The streamers dissolved, new ones took their places, waves of brightness undulated over the sky, celestial banners were unfurled, and squares and triangles mingled in the celestial architecture, the varied forms making their rapid course over the sky, now uniting in vast masses, now breaking in pieces, now joining in bands, and now rolling out into vast draperies, with which to curtain the sky. About 10 o'clock the show reached its culmination with a grand finale in the northeast, in which the most brilliant features of the display were concentrated in the closing scene. The light was like that with which in high localities the sun some times irradiates a portion of the landscape while the rest is left in shadow. Thus the aurora lighted a hill-side in the distance, and thus this weird agent of the sun threw its beams through the trees in a neighboring pine grove, distinctly outlining their forms and gleaming like sunlight between their trunks and branches. A charming feature of the show was the fall of three meteors from the bowl of the Dipper. The first and third were of the ordinary kind, but the second was as large as a star of the first magnitude, and, as it exploded, left behind a train of crimson light, thus furnishing, for a few seconds, the one element that was wanting to the perfection of the exhibition. For, unlike the grand display of the 16th of April, in which all the hues of the rainbow were represented, the aurora was almost colorless, being white, slightly tinged with blue and green.

At 10 o'clock the moon made her appearance upon the scene, and, though in waning glory, her light was sufficient to break up the brilliance of the show. When, at the latest observation, she was nearly half way to the zenith, the north-western sky had resumed its normal condition, though auroral banners were still faintly floating in the northeast.

The cause of these auroral outbursts is a question of universal interest. The sun is now passing through the maximum period of sun spots, and a condition of great disturbance agitates his fiery mass. It is generally believed that sun spots and aurora bear to each other the relation of cause and effect. No human being has ever yet found out why a storm in the sun is followed by a display of auroral light in our atmosphere. Nothing in modern astronomy is more desired than a solution of the mysterious relation existing between the sun and his family of worlds. For, doubtless, when our skies are illumined with auroral light, every planet in the system responds to the same all-pervading power. No one knows how many centuries of observation must pass before the key is found to solve the mystery. But, in some unexpected hour, light will break forth from the darkness, and the secret of the sun's physical structure will be comprehended.

FREIGHT CAR COUPLERS.

A correspondent, who has given much serious thought to the question of preventing the slaughter of railway men while making up trains, expresses the opinion that an automatic coupler for freight cars is a mechanical impossibility, so long as the present custom prevails of allowing each car builder or railway company to make the height of the coupling point whatever individual convenience or caprice may dictate.

The use of automatic couplers on passenger cars has been made possible by having the bumpers and coupling centers at the same level on all cars using the same coupling system. Corresponding uniformity in freight cars would make automatic couplings successful with them; and, in our correspondent's opinion, such uniformity of coupling level should be compelled by legislative enactment. He says: "Mine owners are compelled to sink expensive shafts and slopes, and to spend thousands of dollars in other ways, for the safety and health of their men. Why should not one class of men be protected as well as another, and by the same means—legislative—if the humanity or self-interest of employers does not lead them to do it? Once get uniformity in height of bumpers and coupling centers, and the successful automatic coupler will be easily attained, but without uniformity the time of inventors and committees of master car builders, and the money spent in their investigations, will be worse than wasted, for such efforts only delay the pressing of the subject to the vital point—uniformity in height of bumpers and coupling centers, particularly the latter."

Touching the alteration of existing cars, our correspondent says he has never seen any cars with low couplings where any serious mechanical difficulties were in the way of raising the coupling centers to make them correspond with cars having higher coupling centers.

If this opinion is correct the first step toward uniformity would be a general agreement with respect to a standard height for coupling centers for all new cars and all repaired cars which would readily admit of a change to the standard height or to something near it. The diversity which now prevents the use of automatic couplers would thus be gradually done away, at least on the lines which carry the great bulk of the freight of the country, and in whose busy yards most of the coupling accidents occur.