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## THE BCIENTIFIC AMERICAN SUPPLEMENT

 INO. 140,

## INDEPENDENCE AMONG ARTIBANs.

A number of years since a hosiery factory was started in one of our country towns, and workmen for it imported from England and Wales; for a little while all went on well, but finally the company failed and the works were permanently closed.
When deprived of the factory work, most of these work.
men, sensibly recognizing that work was better than idleness and bread more sustaining than any amount of grumbling, they had cast their lot, set up, each of them, a hand loom or two in his little house or room, and continued the manufacture of the goods which they had produced at the factory, and by the aid of the country storekeepers disposed of them to such advantage that now they are all in independent cir their especial productions
We cite this productions. We cite this one of many instances which have come to
our knowledge to indicate what may be done by many of those artisans with us who are now out of employmer.t.
To our mind the past years of prosperity, of high wages, and exccssive demand for workmen were, generally speaking, far more hurtful to the laboring classes than the few recent years of depression and stagnation, for in the recent and present times are sown the seeds of patience, self-denial, and self-reliance

## and trained

The chronic superabundance of the abor supply in the older countries has developed some conditions full of useful suggestions to us.
Wherever we travel there we are surprised to learn that a arge proportion of the smaller articles of manufacture, with which, in some instances, the trade of the world is supplied, are made by artisans in their own houses and with the simplest appliances; and we find there also, in almost every large town or city long established, business houses whose sol business it is to receive and distribute these goods, to fin
markets for the handiwork of the independent workman.
We know of prosperous firms in England who do a very extensive trade in this way on an investment probably of not more than $\$ 10,000$. Obtaining samples of their productions from the various artisans so employed, they intrust them to their "drummers" or " commercial travelers," who travel in every direction exhibiting them and soliciting orders; on re ceipt of an order the special workman is notified, and soon
makes his appearance with his basket or bundle of goods, which are inspected and paid for according to previous agreement. The goods are then put up in the conventional pack ages and shipped according to order.
Almost every variety of article of household and builders' hardware, wooden and tin ware. brushes, brooms, etc., made by independent working men and women, are thus collected and disposed of by this one house; and this is but a samp of the hundreds that are engaged in the same business.
Thousands of our artisans could thus make themselves and families independent of corporations and capital, and secure against the pressure of hard times.
Of course it is not to be expected that all the articles thus produced would equal in finish those manufactured by improved machinery, nor that they could be sold at such a profit as if they were manufactured on a large scale; but the independent workman would neither expect nor require such proits as are necessary to the life of a corporation, with its
costly buildings and machinery and its salaried officials; and he may be always sure that any intelligent labor of his will enhance the value of whatever kind of crude material it is applied to, in a measure sufficient for his needs and comfort. While we would advise and encourage to the utmost genanother element to insure its pecuniary success.
Established in most cities are women's aid societies, whose charitable business it is to receive and sell the innumerable articles of women's handiwork, and whose labors in this direction have ぬept distress and despair from many households. These societies supply a want long and keenly felt; willing and skillful hands these were, but they could not keep the wolf
ally. ally.
All over the land, too, in every town and city, associations of mechanics have established stores, "union" stores they are called, for the purchase of provisions and groceries at lowest prices, and the sale of them to the members of the associations at but little above cost, thereby securing in this
direction to their beneficiaries all the advantages of combined capital and enterprise.
These aids to the poor and impoverished, admirable so far as they go, are still far from satisfying all the conditions; the women's aid societies help the impoverished, but rarely the poor; the " union" stores furnish cheaper food to the poor and struggling artisan, but afford no direct help to his efforts
at independence.
An incentive, a hope, a certainty indeed must be heid out to him, for he cannot afford to risk a day of his precious time before he can dare to make the effort for liberty And in what better way can this assistance be secured than through "union"associations for the sale of every kind of handiwork produced by these workmen?

The unparalleled feat of thirty-nine consecutive bull'seye shots, at eight hundred yards, has been made on the Wheeling (Western Va.) range by Professor Dwight, in the competition for a position in the rifle team of this year.

WHAT AMERICANS HAVE DONE FOR TURKEY.
A late issue of the British Quarterly Revien devotes a large amount of space to an appreciative survey of the incidental and secular results of recent American labors in Turkey, and shows that those labors have not only been enormously beneficial to the people of Turkey, Asiatic Turkey especially, but also the chief source of the world's scientific knowledge of the geography and ethnology of those regions. For half a century the civilizing influences at work in Asia Minor have been mainly of American origin; and it is gratifying to know that the new protectorate of the East is predisposed by faith and ?lond to treat with fairness f not with favor the agencies which American missiouaries have established there for the amelioration of the physical and social conditions of the people, as well as for their inellectual and moral enlightenment.
Leaving out of view the work of religious reformation which our missionaries have been engaged in, not because that work is not appreciated, but because the British public is already somewhat well informed in regard to it, the Quarterly writer dwells at great length upon the more apparent results of New World efforts to introduce modern ideas and modern civilization into the very heart of the oldest part of the Old World. This is done by reviewing what Americans have accomplished in the Turkish Empire in respect to the following particulars: 1. Exploration; including some notice of the physical geography and ethnology of the country. 2. Literature and education. 3. Medical practice; and 4. The improved condition of woman.
Under the first head the reviewer note. with more or less of detail the explorations carried out by thirty or forty American students of the East, some of which, like the exploration of Palestine by Robinson and Smith, and of Armenia and Persia by Smith and Dwight, mark eras in antiquarian research. One of the marked peculiarities of the Turkish Empire is the great number of separate races over which the Sultan so imperfectly rules. Among them are the Kurds, the Osmanli Turks, the Arabs, the Yezidees, the Greeks, the Bulgarians, the Circassians, the Copts, the Armenians, the Druses, the Maronites, and the Turcomans, besides great numbers of occasional and straggling residents, as gypsies, Persians, Hindoo Fakirs, and wanderers from the interior of Africa and from the most distant regions of Central and Eastern Asia. In answer to the question, What ight have the Americans thrown upon the national characteristics of these previously little known peoples? the re viewer says that "in their published works and letters the Americans have brought out in the clearest manner the marked and peculiar characteristics of each nationality."
The tribute paid to American efforts in behalf of literature and education is even more generous, and it has been fairly earned. Fifty years ago the press was unknown in Turkey; there was not a single school book in the spoken lauguages of the country; and modern science was a thing undreamed of. Now, in addition to the Scriptures in all the leading languages and most of the dialects of the country, full lines of school books are published in Armeno-Turkish and Armenian, besides works in Arabic on anatomy, chemistry, natural history, physiology, botany, surgery, materia medica, mental philosophy, physical diagnosis, and astronomy. Treatises on pathology, geology, and history are in course of preparation. The reviewer says: "The testimony of those best qualified to judge in regard to the character of these books is that they are well prepared, both in respect to matter and the style of the language." Up to 1875 the mission presses at Constantinople and Beyroot had pricted a total of $446,460,120$ pages in Armenian, ArmenoTurkish, Greco-Turkish, Bulgarian and Arabic.
Limited space forbids any attempt to describe the educational work done in the schools and colleges established and sustained by American efforts in the Turkish dominions. Suffice it to say that there are two hundred and ninety common schools, with nearly twelve thousand pupils of both sexes; fifteen girls' boarding schools of higher grade, with between four and five hundred scholars; several high schools for young men; seven theological seminaries, and three colleges. A fourth college has recently been projected.
Most interesting is the account given of the labors of American physicians in administering to the varied wants of a people otherwise destitute of intelligent medical treatment. The reviewer says: "We find ourselves embarrassed by the great amount of information before us in regard to the char acter, extent, and results of this medical work in Turkey. It is all the more worthy of note because it is unknown except to a limited circle in the United States, and scarcely at all in England. For a long period of years well educated phy sicians and surgeons from America have been quietly working in all parts of Asiatic Turkey These gentlemen have made extended and interesting reports in regard to the diseases of the country, the climate, the state of medical practice, and their own special labors." These reports re call apostolic times, when the gratuitous healing of the sick, the maimed, and the blind preceded and prepared the way for the work of evangelization. The reviewer takes leave of this part of his subject reluctantly, feeling that he has done scant justice to the immense amount of hard and often selfdenying labors of the American physicians in Turkey, most of whom laid down their lives in the cause which they had espoused.
When the Americans first began their work in Turkey the set of public sentiment was very decidedly against the education of women; this among Christians as well as among Mohammedans. The effort to make women sharers in intellec-

