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EL MAHDI.

The man who now confronts the British in the Sudan was made a Khouan, or brother preacher, of the order of Sid Abd-el-Kader about twenty years ago; five years ago he was elected by the council of the order to take command of the army in the South. He was thereupon proclaimed *Mahdime* (sublime), the "arm of the Almighty," and invested with absolute authority over the faithful, whom he promptly invited to join his forces under penalty of death. His name is Mohammed Ahmed. He was born in Dongola, Nubia, about 1840, and was educated at a religious school near Khartoum.

El Mahdi proclaimed his call to fulfill the prophecy touching the coming prophet of the South, and began to organize an army in 1881. The Governor-General of Khartoum commanded him to disavow his pretensions, and sent a small force against him to enforce the command. These the Mahdi soon defeated and dispersed. A second detachment met the same fate; then a column under Reschid Bey was destroyed to the last man. The following January he intercepted an Egyptian corps, on the way to Khartoum, and killed them all; in June, he annihilated another; and still another (under Yousef Pacha) in July. In every case the captured soldiers of the Khedive were given to the spears; native soldiers were absorbed into his own army, when it suited his purpose.

The next year El Mahdi overcame the Egyptian garrisons at El Obeid, the capital of Kordofan, and killed them all, with the European officers in command. As a rule, Christian and Egyptian civilians, with their women and children, shared the fate of the garrisons. From El Obeid the Mahdi invaded Darfur, but returned to his capital to meet the Egyptian army which had been sent against him under General Hicks. The invaders to the number of 11,000 were surrounded, and mercilessly slaughtered. This in the fore part of November, 1883. Last year he wiped out the Egyptian garrisons along the Nile, above and below Khartoum, which stronghold was closely invested and at last captured, despite the heroic defense of General Gordon. With the fall of these fortified posts, particularly Khartoum, the Mahdi has come into possession of steamers, cannon, rifles, ammunition, and other military stores, in quantity sufficient for a severe and protracted campaign; and the failure and retreat of the British relief expeditions—if nothing worse than failure befalls them—completes the record of his military successes, and necessarily adds enormously to his prestige as prophet and warrior.

What the issue will be, time only can determine. False prophet or true prophet, El Mahdi commands the situation; and unless Great Britain is prepared to absorb Egypt and the Sudan, and undertake to establish an Ethiopian India in the heart of Africa, any attempt to punish him in Nubia or to dispute his pretensions in the Sudan will cost more than it will come to.

THE MECHANIC'S CAPITAL.

At this season of the year business men are accustomed to "take account of stock," that is, review their assets in detail and sum up the value of their stock in trade, to discover exactly how they stand, and what courses may be best for their future success in business.

Such is not the general custom of men depending for support solely or mainly on their power to earn wages. They are more apt to let things go as they have gone, unconsciously assuming that they have no assets, no stock in trade, and that it does not lie within their power to materially alter the conditions of their daily life and income, unless, it may be, to strike when their mates do for higher wages. Yet the poorest laborer has capital, the amount and value of which he can usually increase, sometimes greatly increase, with comparatively little care and effort; capital which from the nature of things must inevitably vanish as the years roll on, may be slowly, may be suddenly and utterly any day. Failing to recognize the existence and importance of such working capital, too many working men squander it thoughtlessly, while more allow it to waste away to nothing, with scarcely an effort to arrest, or lessen, or prevent its wastage or destruction, and without much effort to acquire other capital to fill its place.

Take, for example, the case of a young man beginning life as a laborer, and able to earn no more than a dollar a day. What capital has he to take account of?

Of visible stock in trade he may seem to have nothing, not even a shovel to dig with. Nevertheless, he has an actual capital equivalent, if rightly used, to a safe investment of from \$5,000 to \$10,000—capital that he may increase or diminish, throw away or multiply indefinitely, just as he chooses, just as readily and as surely as the average business man can squander or increase an equal sum invested in trade.

Ten thousand dollars in U. S. 3 percents (now quoted above par, and accordingly reckoned by investors as desirable as well as safe) yield \$300 a year, or, omitting Sundays and holidays, \$1 a day. That is the amount earned by our young laborer. It is fair, therefore, to reckon his rude strength, and intelligence sufficient for simple labor, as worth as much to him as \$10,000 in government 3 per cent bonds; and it is actually

worth more to him than that amount of invested money would be if coupled with inability to earn his living by the use of his hands.

What young laborer, not a fool, would sell his two hands for \$10,000? Or would, for that relatively small sum, exchange his vigorous bodily frame for the body of a paralytic?

Youth, health, and a capacity to do are elements of a working capital that many a millionaire would be glad to swap his millions for.

But these are not all the productive elements of a young workman's capital, though they are elements which too many squander without ever estimating their value until they are gone. Wages so small as \$1 a day presuppose very little intelligence, very little skill, and no great responsibility. These, for wage-earning purposes, are factors of higher value; and the worker who adds them to his capital will soon find its productive value doubled, tripled, possibly multiplied many fold. And it is always possible for the young worker thus to increase his capital by adding to his knowledge and skill, and still more by proving his fitness for positions of trust and responsibility.

A larger knowledge of mechanics, finer workmanship, the ability to handle new tools, or the acquisition of a new art, which any young mechanic may gain by the improvement of a winter's evenings, may easily add a dollar to his daily wages, and accordingly may be counted as adding another ten thousand to his invested capital.

Since wages measure the worth rather than the severity of one's labors, and nothing adds so much to the worth of labor as intelligence, skill, and trustworthiness, it usually happens that the best paid labor is not the severest or most exhausting. Indeed, it often happens that a man's trusty character is by far the most valuable, because the most productive, part of his working capital, earning him two, five or ten dollars, where his brute capacity to toil would not bring more than one dollar.

In view of these obvious facts, it may not be impertinent in us, at this season, to suggest to our readers—those especially who are beginning life as mechanics—that it is a good time to look to their invested capital, to see what it amounts to, how it is invested, and how it can best be protected and increased.

WEBBED PULLEYS.

If there is no positive, particular advantage in the spoked or armed iron pulley over the center webbed pulley, there is no adequate reason why spoked pulleys should continue to be cast in preference to the plain webbed pulleys. Probably the only advantage urged is that the spoked pulleys are lighter; but there is no truth in this supposition; a webbed pulley can be cast that is not only stronger but lighter than a spoked pulley of the same diameter and width of face.

The advantages of the webbed pulley are easily seen. The patterns can be much more easily made, and more easily moulded. The web may be on one-half of the pulley, and the other half be merely the rim, with the half hub fitting the center of the web. The wooden pattern can be built cheaper webbed, and certainly the iron pattern can be more readily finished and fitted. It is no fool of a job to finish up the iron patterns for a spoke pulley, the spokes being made in halves.

The web of a good sized pulley—one of twenty-four inches diameter and six inches face—need not be more than five-sixteenths of an inch thick; perhaps a moulding for additional strength to run around the inside of the rim next the web may be added. This web would be manifestly lighter than six spokes, or arms, whether they be directly radial or curved.

If the balancing of a pulley is desirable, a web of half an inch thick would allow for turning and truing. In chucking for boring on a face plate, two or three half inch bolt holes through the web would be as convenient as the spaces between six spokes; and instead of having intermediate bearings, as the spoke pulley, on the face plate, the web would make a flat continuous bearing, preventing the chattering that is sometimes so inimical to good work.

An old moulder says that with webbed pulley patterns in place of the spoke patterns, there would be much less breakage from unequal shrinking in the mould than now.

A THRIFTY LIFE INSURANCE COMPANY.

The fortieth annual statement of the New York Life Insurance Company, which is published in another column, makes a very favorable showing, notwithstanding the depression of the last year in nearly all branches of business.

The New York Life Insurance Company has a surplus of several millions of dollars, and its officers and trustees are recognized as among our most substantial and trustworthy citizens.

This company issues all classes of policies, including non-forfeiture, non-contestable on account of suicide, Tontine investment policies, etc. Their rates for premiums, under their different classes of policies, are liberal, and we do not know of a safer company in which a person can insure his life than the New York Life.