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FOR A NEW INVENTION.

In the manufacture of flour the outer cuticle of the grain the quality of the chaff intact. is separated by sieves in the form of bran, the particles of of standing apart and holding air between them, thereby octons of bran, or thereabouts, now annually produced and of flour will only contain about 70 pounds of bran.

The quantity of bran annually produced in this country is millions of dollars a year. enormous. Of flour we are supposed to manufacture about fifty millions of barrels yearly; for every barrel of flour made, immense value and utility. The man who produces it probably about 40 pounds of bran is produced.

Bran forms a superior article of feed for animals. As a owing to its great bulk, and the lack of proper devices for vention. its condensation or compression, it is difficult and costly to transport; hence it is almost a drug to the maker. brings about five dollars a ton in this country; but in Eng- improvements until they are protected by patent. land it sells for almost twenty dollars a ton. In the earlier practice of our Western milling it was common to turn the bran into the river and let it float off as waste. Even now it barely pays for handling.

With a view to the calling out of some new method, process, or invention, by which bran can be more profitably financial and commercial affairs brings him into daily intermarketed, the Millers' National Association have recently made public an offer of a premium of one thousand dollars in cash, which is to be paid to whoever is able to meet the following requirements and suggestions:

MILLERS' NATIONAL ASSOCIATION.

Secretary's Office, Milwaukee, Wis., February 19, 1883.

By virtue of a resolution adopted at the Delegate Convention Millers' National Association, in Cleveland, January 31 in connection with operations of great magnitude. It is felt ult., the Sub-Executive Committee are instructed to offer a wherever there is need of full, specific, and exact knowledge, cash premium of \$1,000 for the invention and production of coupled with self-reliance, practical judgment, and skill to the best practical machine that will enable mills of ordinary deal promptly and wisely with novel problems. capacity to compress bran economically into a suitable, cheap, and safe package for export, at a saving of at least freight, over the methods now in general use.

Requirements.

First. A machine that will compress one hundred pounds of ordinary bran into a package not to exceed fifteen (15) inches square, or two hundred pounds in the same ratio.

Second. That will, with the aid of an attendant and a reasonable amount of power, prepare for shipment one ton or more per hour.

Third. The inventor or owner of the successful machine must stipulate to sell it at a reasonable price (to be agreed upon between the Executive Committee and himself) to all members of the Association.

Fourth. The offer to remain open one year, the committee to be at liberty to reject all devices, competing for this premium, that do not come up to the requirements of the trade.

Suggestions.

First. Other results being equal, the machine producing a package with the best form for close "stowage," will have: the preference.

Second. The package should be compressed in such a manner that when the covering is removed the bran will assume the stages of service, practically mastering each department its ordinary condition without manipulation.

Third. No machine, or process, requiring the addition to bran of moisture, or any foreign substance, will be enter-Fourth. It is desired that parties building, or with machines

in model, intending to compete for the premium, will report progress at an early date.

For further particulars address,

S. H. SEAMANS, Secretary.

ject. The real reward to be derived by the successful in- out of sympathy with the modern world which the rising ventor will come to him through the protection of the patent generation is soon to take possession of. From the moment laws. These beneficent regulations present to every person the boy begins to prepare for college he faces the past; edua perpetual encouragement to study out and develop new cationally he lives in the past; and the more conscientiously improvements; and they grant to the successful inventor, he does the work laid out for him the vaster will be the final in the name of the nation, the opportunity of securing a gap between college life and real life. The intellectual generous reward for any new art or industry that he brings habits acquired in school and college may possibly enable before the public.

from grinding steel.

chinery, drawings, patent fees, etc. The committee may as of experience. well dismiss the idea of ever being called upon to pay the money, in the face of stipulation number three.

They ask the inventor to press their bran down to a dens- are few boys who do not rebel more or less against the

COMPRESSED BRAN .- ONE THOUSAND DOLLARS REWARD ity more solid than hickory wood, and retain the compression in the form of a merchantable package, still keeping

If this can be done, the commercial effect of the invenwhich are exceedingly light, but strong and elastic; probably tion will be to increase the selling price of bran probably they become electrified, for they have the peculiar quality five or ten times above its present rate; and the 1,000,000 cupying much space. Thus a barrel that carries 196 pounds sold say for five millions of dollars, will bring to the twentyfive thousand mills of this country perhaps not less than fifty

The invention called for, if actually realized, will be of will be master of the situation; and to him will belong the exclusive privilege of dictating the terms upon which the mixer with other foods it is of unquestionable value; but members of the association may enjoy the use of the in-

> Referring to suggestion number four, we would caution the inventor to give out no description of the nature of his

SCHOOLED BUT NOT EDUCATED.

The great lack of our country to day, said a shrewd observer recently, is properly educated men. The speaker was a rarely capable business man, whose connection with large course with many of the leading business men of the coun-

Our material progress has been so rapid, he went on to say, that men have failed to keep up: consequently the country is full of possibilities which cannot be developed, and of enterprises which are suffering grievously for lack of competent men to manage them. And the difficulty in finding the right men for the waiting work is not felt simply

The men who are now doing the larger work of the world as best they may, have for the most part grown up with five cents per hundred pounds in the process, package, and their affairs, under conditions comparatively favorable for gaining and retaining the mastery of them. But these men are waxing old, are rapidly dying off, and their mantles fall upon younger men, whose entry upon the stage of action was too late for them to benefit by the earlier formative experience enjoyed by their fathers.

The world's business calls for a wider and wider range of real knowledge, a broader grasp of principles, and a larger executive ability than were necessary a few years ago. At the same time the specializing tendency of the age—the development of specialties within specialties, an inevitable consequence of the increasing magnitude of commercial and industrial affairs-leads to narrower experience, narrower training, and, too often, to a serious limitation of men's grasp of affairs in general, their relations, and interactions. The demands of future years are likely to be for men of larger and still larger capacity; yet the conditions for their development are becoming less and less favorable in active business life as the years roll by, and the subdivisions of service become more minute.

The day has passed, or soon will pass, when a man could begin as a common laborer and rise in succession through all up to the direction of, say, a great transportation system or other enterprise of national magnitude. The steps are too many and the ascent too great. To a larger extent also, the real workers must remain subordinate while the heirs of capital command the higher stations. How are they being educated for their great responsibility?

The speaker above referred to dwelt with much feeling upon the inadequacy of the traditional systems of education to meet this new requirement. With a few exceptions The chief utility of such a premium consists in directing the our great educational institutions, and still more the smaller special attention of ingenious minds to this particular sub-ones, are in grasp and spirit far behind the age, and entirely him ultimately to grapple with greater power and skill The problem which the association presents for solution is with the later problems of real life, greater, that is, than he doubtless a difficult one; but we think that some reader of the would have shown had he been left entirely unschooled; yet Scientific American will be able to solve it. Whether ac- in the administration of affairs he is likely to be distanced complished or not, we are confident that many ingenious for the best part of his life by the unschooled practical man minds will devote study to the subject; and, as always hap- who knows from early and real experience precisely what pens in such cases, these researches will open the way to hun- to do in any emergency. The young man fresh from school is dreds of collateral suggestions for other novelties. Under apt to know with thoroughness much that the busy world pressure of thought the inventor's brain is apt to yield mul- has no use for. He has general notions of many arts and titudes of new ideas, which fly out involuntarily, like sparks sciences, but his positive knowledge of the realities upon which such arts and sciences are based is usually next to The offer of the association would have appeared more nothing; still less does he know of the practical methods of just and liberal had the third requirement been omitted. It men who apply them to human uses. His educational years conveys the impression that the committee regards the pay- have been spent mainly in a world apart from and largely ment of the thousand dollars as a consideration of so much, out of relation with the modern working world he is to enter importance that they ought to have the practical control of | upon when his schooling ends. His education, admirable the invention. Such a notion seems almost absurd. Why, as it may appear from a theoretical point of view, serves it will cost the inventor, in preliminaries, more than a rather to unfit than to fit him for practical life: and his real thousand dollars for time, labor, models, experimental ma-jeducation has to begin afresh in the rude and costly school

> This, of course, on the assumption that the youth's education has been wholly by school work. Fortunately there