

up the passages between the islands at the western entrance of Hudson Strait, where it is kept in rapid motion by strong currents. Log-books kept by whalers show that it is frequently found in Hudson Strait in September. We should say that the passage will never be safe, and that large freight-steamers, such as would be required for this trade, cannot be run longer than from the middle of July to the first days of October. It is improbable that under such circumstances a railroad to Fort Churchill and a line to Hudson Bay would pay. The shortness of the season and the dangers of the ice are so great, that this line cannot attain a great commercial value.

THINKING IN SHAPE AND PICTORIAL TEACHING.

THE Rev. Edward Thring of Uppingham, the well-known author of 'Theory and Practice of Teaching,' spoke before the teachers' guild in London recently on thinking in shape and pictorial teaching. Mr. Thring began by drawing attention to the vital distinction which divides mankind, consciously or unconsciously, into two classes,—those who value knowledge, and those who value the seeing heart and the seeing eye. The pursuit of knowledge is the creed of the first. Knowledge he defined to be for the multitude second-hand information, which, however valuable, may, like gold in the desert, be utterly useless. He then showed, that, precious or not, few get it, and that the unsuccessful attempt to get it is deadly to living power. Living power is required, and can only be given by teaching pupils to think in shape; that is, to train the mind, whenever it sees any thing, to find out at once what thought made the shape it sees; and, on the other hand, to take every word used and put it at once into some definite shape, example, or reality. Examples of this were given, showing the difference between an arithmetical fact and living feeling, between words and memory and a vivid mental picture. Then the lecturer proceeded to show that every word not vividly understood is a cipher, and that words are not vividly known, and never can be vividly known, unless thinking in shape is taught and practised. After showing the failure of memory-work, the lecturer pointed out that the commonest objects cannot be described correctly, because no one has been taught to see what they really are. A common chair can be made to give a history of thought and life and experience taking shape, and to lead up to the great fact that every shape is such a history, a living narrative, and the whole world a great illuminated volume of thought, speaking through shape which can be read by those who have learned to read thought in shape. But if this is so, then all shape is a language speaking truth or falsehood, giving honor or dishonor. And it does matter whether rooms and appliances are worthy or unworthy. How, then, has England treated lessons? Let the class-rooms in all their meanness answer. Then what class-rooms ought to be was shown, and examples brought forward of pictorial teaching. The way in which walls can be decorated without the painter going near the wall was explained, and designs for wall-decoration given. The treatment of books, and what is needed for books, next claimed attention. Then the effect on language of thinking in shape was dealt with, and the true progress of art by expression ever becoming more vivid in word and painting.

"Thinking in shape and pictorial teaching at once turn all created things into new language for thought. Every created thing becomes, on the spot, a possible new bit of thought, a possible new word born into the world of speech. I throw out, as a suggestion for any master of language, as distinct from a doctorer of words, to examine into the curious fact, that in the last eighty years the English language has in this way doubled itself, by flashing new light into old words, by new combinations of words, by freer use of allusions and metaphors, and by pictorial handling of its material; and that it is practically a new language, in its wonderful increase in power of expression, and the breathing of new life into its shape. For expression goes on forever, as higher life produces higher manifestation of life, feelings, and thought, in human face and form, and again becomes able, by being higher, more sensitive, more sympathizing, not only to see and interpret the new shapes, but to find endless riches of unknown stores of precious discoveries in the old. This is the only true path of progress.

"The pictorial mind first pictures to itself all its own ideas, and

thinks in shape; and, secondly, is ever extracting ideas, new and old, out of the things it sees, picturing to itself all the words it uses, translating and retranslating thought into shape and shape into thought, till all things live and move for it in a universe that is living thought incarnate. The lesson-book is always before it. In city or desert, church or hovel, street or field, with flower, or tree, or cloud, or sun, or animal, or bird, or insect, from end to end of all things, there is the everlasting voice crying, 'He that hath ears to hear let him hear, he that hath eyes to see let him see, for life infinite, language universal, lies at your feet for pleasure and use always.' The pictorial mind is the only power man has that is capable of infinite progress. It is the only power that belongs to all men. It is the only power that is within reach of the poor. It can be taught. It can almost be created.

"As the world goes on and knowledge increases, it will be more and more impossible to know it all, a thing which was once quite within reach. Every man, however learned, will be narrowed by degrees down to a single subject. But subjects are many. There are a thousand languages, for instance; to know how to speak even half a dozen really well is an achievement; and so on, through the whole range of knowledge. How can any one man cope with this accumulation of facts? Boasts of knowledge, therefore, belong to the nursery level, betokening stupendous ignorance of man's capacity for knowing, and of what there is to know. Let us get out of the nursery and betake ourselves to true progress, and men as they are."

But "as long as examinations reign, there can be no true teaching," said Mr. Thring, "and thinking in shape and pictorial teaching find no place."

MENTAL SCIENCE.

Can the Mind attend to Two Things at Once?

THIS question has been frequently asked, and variously answered, according to the conception of 'attention' and of the objects to be attended to. Those who lay stress on the unity of mind regard it as almost evident *a priori*, that but one concept can occupy the focus of attention at a time, and that, if apparently many are entertained by consciousness at the same moment, it is simply because of the rapidity with which the attention can flit from one to the other. The holders of the opposite view call attention to the fact that in the quickest possible glance, in the flash of an electric spark, we get a view of an object, capable of being analyzed into a series of concepts, and that we saw every one of these as well as any other. A French psychologist, M. Paulhan, has recently stated the problem in its proper aspect, and illustrated the position he takes by some very interesting experiments. What is at one time the sole object of attention, completely filling the field of consciousness, may at another be only a small part of that field. Attention, like the lens of the eye, is now accommodated to act as an instrument of near focus, high magnification, but limited aperture, and again as one of distant focus, small magnifying-power, but wide range. At one time we see the rider and the horse as a single object; at another they are two. Admitting, then, that the object of attention is determined by a subjective element, by interest, by importance, by attractiveness, or what not, it remains to similarly determine the meaning of 'attention.' Just as memory is, from one point of view, not a single faculty, but a co-ordinated set of separate, individual memories, so attention is capable of various degrees of intensity, of various subdivisions of function. There are currents and undercurrents of attention. The eye may be intently engaged in looking for a friend, while the ear is drinking in the notes of a symphony, and we are suddenly conscious of a draught in the room. Whether or not there is a loss of energy between these occupations is to be determined by experiment.

M. Paulhan wrote the lines of one poem while reciting the words of another. The two series would sometimes get confused, a word, syllable, or prominent letter of the recited verse creeping into the written; but such mistakes soon became rare. The two series are largely strung on separate strings, and proceed in parallel directions. To repeat one poem aloud, and mentally go over the words of another, caused greater confusion.

If we compare the sum of the times necessary to perform each act separately with the time necessary to perform the two together,