himself in them out of place. It is a question whether it would not tend to greater advantage to the mechanics of the country for Government to withdraw these grants altogether, and apply the funds to technical schools and to the machinery and apparatus necessary to teach by practical illustration. There is no more important question now before the country than that of reform in the class of education to be taught to the masses, and an effort must be made to bring that change about as soon as possible.

ARCHITECTURAL DESIGN.

The principal faults in architectural design in the present day appear to lie in the direction of unrestrained or undisciplined ambition, or in false taste, which leads the young architect to tell all he knows, and sometimes more, at a single effort, as if he never expected another opportunity. Or, on the other hand, an endeavour to produce something so different from others and so startling in effect, in the expectation to distinguish himself in his profession by one stroke over others whose knowledge of its rules has been a life-time study.

Repose by these young men is condemned, and in place of it we find a fidgetty, over-conscious display of knowledge in their first buildings, in which too often all rules of architectural proportion, taste and design are violated; facades loaded with inappropriate and meretricious ornamentation, and appearing, when viewed with a calm critical eye, like an overdressed, vulgar woman.

Although the conditions under which the profession is practised to-day, is wholly different from those which prevailed some years ago, the mental equipment with which the young architect now starts forth on his career is very different from the lesser opportunities which architects not a quarter of a century ago possessed.

The extraordinary multiplication of books and photographs, and the admirable course of instruction offered in our colleges, joined by a singular revival of enthusiasm for the art, has given him immense advantages, and he has only himself to blame if he has not the examples of all styles of ages at his finger ends, as well as in his portfolios and scrap-books. In fact his danger arises not from want of technical knowledge, but from intemperance and disorder in the use of it.

The great danger that the young architect is likely to fall into is a feeling of independence of fixed principles, an inclination to start off the road travelled so long in safety by others, and strike out something piquant and unique for himself. From the want of fixed principles his mind wavers and his ideas are visionary. This year it is English gothic, the next in the reign of Queen Anne, the year after the French Renaissance, or perhaps a mixture of every style, by way of being eccentric, and an audacious defiance of the plain rules of common sense or the requirements of common convenience as by a real achievement of art.

We trust that the day is not far distant when a restraint will be put upon this wild license of practice, and that good taste and judgment will take the place of the medley of styles and meretricious ornamentation which offend the eye in so many of the buildings which form the street architecture of some cities in With the encouragement given to Art Education, under the patronage of His Excellency the Gov.-General and H. R. H: the Princess Louise, false taste in design will receive a check.

Enblications.

VICK'S FLORAL GUIDE.—We are in receipt of this beautifully got up and instructive work for 1880. family, having a taste for the cultivation of flowers, should be without a copy of this really elegant publication. It contains no less than 500 elegant illustrations of every variety of flowers, and is a perfect guide for the florist in the selection of seeds or bulbs for the coming year. The work is forwarded post free for the small sum of five cents and the Floral Monthly is only \$1 per annum. Both are published by James Vick of Rochester, New York State, who is well-known in the floral world for his nurseries and high floral culture.

HINTS TO CORRESPONDENTS.

No attention is paid to communications unless accompanied with the full name and address of the writer, and with postage stamp if a reply by letter is required.

Name and addresses of correspondents will not be given to in-

Correspondents whose inquiries do not appear after a reasonable time should repeat them. If not then published, they may conclude that, for good reasons, the Editor declines them.

Persons desiring special information which is purely of a personal character, and not of general interest, should remit from \$1 to \$5, according to the subject, as we cannot be expected to spend time and labor to obtain such information without remunera-

The volume for 1879, containing Collin's Machine Construction and Drawing, can be obtained on remitting \$1.50.

Scientific Items.

CAVES OF PREHISTORIC MAN IN MORAVIA

Respecting the discoveries which have just been made in certain caves in Moravia some interesting details are published in the Augsburg Allgemeine Zeitung. For some months past excavations have been going upon the Kotoutsch hill, near Stramberg, which have already brought to light a large number of remains of the highest scientific interest. The work has been carried on under the direction of Herr J. Maschka, a master at the Realschule of Neutitschein, who has conducted the operations in the most systematic and careful manner. The spots where the most important discoveries have been made are the two caves of Schipka and Tchertova Dira (or the Dwarf's Cave). The objects which have been found, and the position in which they were discovered, proves in the clearest possible manner that both the caves mentioned were inhabited by men in prehistoric ages. The cave of Schipka, the roof of which had partly fallen in, was, it is shown, occupied by human beings in the oldest stone age, or palæolithic period, while the occupants of the Dwarf's Cave lived at a later era, when man was already, to some extent, acquainted with the use of metals. It is further evident that the caves were occupied by man at a period contemporary with the existence of the mammoth and cave bear, as at a depth of one metre, among the remains of these animals, there were found bones which had been burnt and others which had been artificially fashioned. jects obtained in the Schipka cave comprise thousands of bones of antediluvian animals, as the mammoth, rhinoceros, cave-bear, horse, cave-ox, stag, reindeer, &c. Further, there are thousands of seperate teeth and horns of these animals, besides numerous well-preserved stone and bone tools, which were dug up as far down as three metres below the floor of the cave. In the uppermost layer of the cave floor the excavators also found seven objects in bronze consisting of a celt, five concentric rings, and one ring with a rectangular cross or wheel with four spokes. In the Tchertova Dira the discoveries include bones of the cave-bear, reindeer, edelhirsch, primeval ox, &c., besides numerous pieces of horn showing artificial work and many well-preserved bone objects and tools, such as awls, or bodkins and pins or needles pierced with holes, three and four edged arrow heads, rough and unpolished stone tools of flint, jasper, and chalcedony; fragments of very different kind of earthenware vessels, with and without graphite coating, which had been made by hand, without the