

ought to be spent on disciplining children, upon over-indulging them. And we carry on the process *crescendo* as they grow up, especially with boys. Mothers and daughters often bear the brunt of life, while all crumpled rose leaves are smoothed away for the sons and brothers; and in our anxiety to

make everything pleasant for these latter, we forget the danger of leaving out, on their behalf, all the sterner lessons of Christianity. The *good* side of the old methods—viz., its training of children to ‘endure hardness’—is entirely dropped along with its bad side.”

NOTES FOR TEACHERS.

LIGHT SIGNALLING.—The triumph of light signalling is near at hand. Lieutenant Wittenmeyer, of the department of Arizona, sent a message by a single flash from Mount Reno, near Fort McDowell, to Mount Graham, near Fort Grant, a distance of 125 miles. The message was received and sent on ninety miles still farther by the same means. The total distance was 215 miles with a single intervention. Heretofore, seventy miles has been the greatest signalling distance.—*Our Times*.

THE INVENTION OF THE PIN.—The modern solid-head pins were first made in 1824, in England, by an American named Lemuel Wright, who soldered the heads on to the shanks. After him, in 1832, came Dr. John Howe, another American, who invented the first successful machine for manufacturing solid-head pins. In Howe's machine the head was made out of the top of the shank, as it is at present, and both portions were completed by a single process.

At a recent meeting of the Royal Botanic Society, a gift of seeds of the Para rubber-tree suggested to Mr. Sowerby, the secretary, some interesting remarks on India rubber and gutta-percha. In the Society's museum

was a specimen of the first sample of gutta-percha imported to Europe—viz., in 1842—and it was shortly after that date that it was used to insulate the first submarine telegraph cables. No substitute had been found to take its place. From some papers lately published in the *Electrical Review*, he gleaned that from the “wholesale cutting down of adult trees” and the “reckless clearing and burning of the forests,” the trees furnishing the most valuable kinds of gutta-percha had become exceedingly scarce, and in most localities utterly extirpated. This was also rapidly becoming the case with the trees which supply the many varieties of India-rubber, and, sooner or later, all natural vegetable products used by man would have to be artificially cultivated, as the natural supply never kept pace with the artificial demand. Some few attempts had been made to cultivate India rubber, but as yet not very successfully.—*Nature*.

THE TEACHER AND HIS METHOD.—Dr. Thomas Arnold was confessedly the greatest teacher England has ever produced. And he was the greatest, not because he made boys understand quadratics best, or rendered them most capable in translating a difficult Latin text or scanning a subtle Greek verse, but because he impressed upon their souls new and noble