must have in her wardrobe one or more substantial woollen gowns, and you will find the accompanying sketch a useful suggestion. It could be reproduced in plain cloth, serge, or almost any fancy woollen, check, or otherwise. The skirt is severely simple, with five rows of stitching at the hem, and it opens on both sides of the front breadth, the aperture rendered ornamental by straps and buttons as you see in the picture. The buttons on either side of the bodice are merely ornamental, and the belt is simply fastened with one. You can wear any kind of shirt with it, and thus produce a great variety in your dress. A young girl starting on a round of visits, with a black serge, has any amount of changes ready to hand if she will invest in a few shirts, blouses, and waistcoats. It would be a very comfortable style for travelling, reducing the luggage to a minimum.

No washing material is so fashionable now as linen, and some of the best caterers of Fashion are making up plain linen skirts and long open jackets in a variety of colourings. White and Holland tints find special favour with light blue or white shirts. Most of our leaders of Fashion have been seen in Hyde Park this year thus dressed, and a gown of the sort comes within the compass of the most moderate purses, only the dress needs to be well made—the more simply the better.

Sleeveless jackets are greatly in vogue, some made in the Eton form with a little point at the back, but more with a rounded turn-down collar, and a point cut up in the centre of the waist, with deep oval slashings on either side, through which a ribbon is run. This can be made to match the gowns, but the favourite material is velvet. They look well with bell-shaped skirts, a great improvement on the umbrella style, the lines falling straight without rendering the edge of the skirt unduly wide.

If you are once able to secure a good shape of

skirt, you may dismiss that part of the subject of dress with contentment. An evening dress looks exceedingly smart with one of the short Empire jackets ending at the bust and supplemented by a wide Empire sash. These have revers, and are ornamented with large buttons, and open sufficiently to show a full front of lace falling downwards from the neck.

Shot silks have been much used for parasols, and these tints appear in varied lights, chameleon-like, to assume quite a different aspect, and match curious colours with which they appear to have no sympathy whatever, but seen together the blending is beautiful.

Long gowns, even in London were beginning to be discarded towards the end of the season. In the evening they were found impossible, and in the daytime out of doors ungraceful. If any of you happen to have by you a long skirt, unduly tight about the hips, let me advise you to shorten it by undoing the centre seam, thereby allowing a wider edge to remain in its original position, removing the extra length from the top, leaving it wider. Make use of all this fulness to the best advantage; do not heed what any secondrate dressmaker tells you. Introduce a little fulness in the front of the skirt. This will break the lines and give softness and grace, in lieu of a hard outline. I explained in the spring how the umbrella and cornet skirts were made, and now we islanders are becoming so nautical in our tastes, that the newest skirt and the newest bonnet rejoice in the name of "Nautilus." The point into which the centre back breadth of the skirt is cut is carried up from between the shoulders as a sort of Watteau, for Watteau pleats in all sorts and materials, both for day and evening wear, are the vogue. In the evening they often start from a large paste buckle, and they must not be too bulky, but must show the outline of the waist, which gives a deal of grace and yet much dignity to the figure, but with a Watteau pleat height is essential.

#### AN AUGUST AFTERNOON CLIMB.

BY ALFRED J. BAMFORD.



HE climb is a good test of one's lungs, for the moor lies high above the busy town from which it takes its name, and the path is often steep. But how amply repaid is he who climbs! How rich a foundation colour the brown peat affords, out of which the bright and ever-varying greens of the whinberry, the

heather, and the many different kinds of grass stand in bold relief! How the clumps of moss, brighter still —some of them almost golden—delight the eye, while they warn the feet from the treachery of boggy places! The heather is just beginning to burst into colour, and the air, fresh and invigorating, makes the blood run a quickened course.

It is "The Twelfth;" but the moor is silent. No report of guns disturbs its quiet. The owners have passed a self-denying ordinance, or, at least, are postponing their onslaught on the grouse, for the young birds of the season, that should by this time be strong on the wing, are not. Disaster overtook them, and the "first eggs" were chilled while they spent a necessarily prolonged time in foraging for food, or—the landmarks being covered by the snow—vainly resought the nests they had left. So the young birds of this season are both few and backward, and the sportsmen must wait.



"AS UNFREQUENTED AND SILENT AS ANY SCOTTISH GLEN."

We are not sportsmen, and therefore experience in this matter neither disappointment nor impatience. If our privileges are restricted, they are immediate. If our right of way across the moor is defined by a narrow path for our feet, our eyes are free, and we have not to wait for our enjoyment. To-day and now we may take our stand upon this high point, and what a vision is ours! We are on the edge of the moor, on a point of it, indeed, that juts out promontory-wise into a comparatively level stretch of country. Far away on that plain we see the smoke from the chimneys of Preston-a grey patch, under which are the busy industry, the grievous disappointments, and the bright and ever-renewed hopes of a population of nearly a hundred thousand of our brothers and sisters, and out from which we can trace the lines of road leading in different directions. Far northward runs one of these, and the eye-following and outstripping it-sees, across the gleam of light on the sands of Morecambe Bay, the smoke rising from the ironworks of Ulverston, and the shipbuilding yards at Barrow. and, more dimly still, traces the faint outline of the higher peaks among the mountains that guard the English lakes. On our right we see the land rising again-rising to heights that far exceed that of the moor on which we are standing. Here is a mighty piling up of mountains, and, overtopping their fellows. we see the lofty heads of Wernside, Ingleborough, and Penygant. To the left, the clustered houses of Black-

pool stand out against the fainter grey of the sea beyond, and, further to the left still, a bright light reveals where the sun, hidden from us by the clouds, is shining on the waters. Behind that silvery light the rain is falling, or we should be able to trace the distant Snowdon range, while behind us, through the openings in the hills, are to be caught glimpses of the smoky factory chimneys of more than one industrial centre. My friend and host, Ellerslie, tells me that about this same time of the year, he was once standing on this spot, watching the sun sink slowly down through the sea haze, and, as the broad shield touched the horizon, it revealed on its luminous background the clearly-marked contour of the Isle of Man. The road that is lost to our sight in the valley to the left, enters, within a mile or so, a district as unfrequented and silent as any Scottish glen, and yet it is within some four miles of half a million of people.

Yes, the heathery breeze, the wide vision of towns and fields, of sea and mountains, the wonderful colours and tints of the moor itself, its shades multiplied by the changeful sky, fill, almost to wearying, eye and mind.

Well, we must go down again, but it is not with any sense of disappointment. We cross the moor to a point where the tiny tricklings of water through the peat obtain sufficient unity of movement to justify them in regarding themselves as the beginning of a little stream—the stream that by and by runs dancing and babbling through friend Ellerslie's grounds. It shall serve as our guide.

When we have got down some distance we enter into quite other surroundings. The wide, open, heathclad moor offers Time almost as unpromising a surface for writing its inscriptions as the surface of the ocean itself, and is probably, in all outward seeming, much as it was when the ancient Britons inhabited the land. The clough, into which our babbling streamguide leads us, and in which, while men have come and men have gone, it has gone on, if not for ever, for a very long time, wearing, or finding, its way, could tell a much more changeful story; for here rain and frost and all the varied agencies of Nature have been ever at work. Especially busy with a most unceasing activity has been the little stream, whose clear water tumbles over rocks in many a miniature rapid, and now and then a fall, while here and there banks of pebbles tell how, during heavy rain, it gathers force and intensity as it rushes down between the rocks that shut it in its narrower channels, and carries along the sand and gravel, which, perforce, it must drop when it reaches the more open spots. Mosses richly decorate the stones around and between which its waters are rushing, while ferns fringe its sides. The whole is shut in by sycamore trees, that give a delicious coolness to the stream where they overshadow it, and that impart to the clough an air of securest seclusion, without being so thickly set as to exclude the light. Between them the sun shines down upon and through the rippling water, limning changeful lines of fairy-like brightness and delicacy on the stony bed. It shines here on the bank, where the bees are busy with the purple nettles, and there it is ripening the wild raspberries. The sycamore leaves are golden with its light, that passes through them in beautiful contrast with the leaves of the undergrowth, on which a grey gleam reflects more or less completely the blue of the clear sky.

# THE GATHERER:

## AN ILLUSTRATED RECORD OF INVENTION, DISCOVERY, LITERATURE, AND SCIENCE.

Correspondents are requested, when applying to the Editor for the names and addresses of the persons from whom further particulars respecting the articles in the GATHERER may be obtained, to forward a stamped and addressed envelope for reply, and in the case of inventors submitting specimens for notice, to prepay the carriage. The Editor cannot in any case guarantee absolute certainty of information, nor can be pledge himself to notice every article or work submitted.

## Teaching Perception.



Mr. Kerr, headmaster of Allan Glen's School, Glasgow, has introduced a new method of teaching a class readiness of perception and mental calculation. The device employed, called the Allan Glen Revolver, is illustrated herewith and consists

> of a revolving blackboard, B, having a shelf, S, attached, on which an article can be placed. On the side of

the board turned from the pupils, rows of figures, dots, or letters are marked, and the board is spun round at different speeds. The pupils must brace themselves up to read the words, or figures, and count the dots. The exercises are graduated, and become more difficult. The board is also used in the freehand drawing class to train the students in grasping and fixing contours in their minds. For example, a jar is placed on the revolving shelf, and the students are expected to draw its outline. Pictures are also shown for a moment in the same way. Lengths, areas,

and volumes are also estimated by exposing certain examples side by side with others of known dimensions.

#### A Cross-Country Railroad.

Let no one think that the days of railway enterprise have passed away. Even in England a district has been found in which the railway has never been, and the new line from West to East, from the docks in the Ship Canal at Warrington to those on the North Sea at Sutton, in Lincolnshire, will, within three years, be a fact accomplished.

A glance at the accompanying sketch map will show the aims and objects of the promoters of the line—noblemen and gentlemen connected with great Derbyshire coal industries, who, dissatisfied with the present means for the distribution of the output, determined upon a line of their own, and on connections by means of which the development of their property and its products could be assured.

With this view the line already projected will be made extending, when completed, for 170 miles, possessing "feeders" to many important towns, and access to London along the Great Northern and Great Eastern Railways. To the Great Eastern line the benefits of the new railway promise immense advantages in the carriage of minerals alone.

The course of the East to West Line—or, officially, the Lancashire, Derbyshire, and East Coast Railway—is from Warrington, a very important town, through Knutsford to Macclesfield; thence by Buxton of