

## A CHERUB UP ALOFT.

**I**N the case in question, the guardian who "up aloft" keeps watch and ward over the life of many a "Jack" and his mate is not "little," and great as may be the regard that should be felt for the representative of a class having partial charge over the safety of between one and two millions of passengers daily, it would be scarcely fair to apply the other adjective—"sweet"—in the quotation to this particular "cherub." "Up aloft" is the first storey of a building—the only habitable room, indeed, for the basement is a dark lumber-room. The abode of the cherub is a marvel of lightness—the sides are nearly all of glass instead of brick, and the door which affords entrance from the stair-head is also glazed. The roof is open, and timbered—rafters and boarding being painted a light and cheerful colour. The small piece of wall is whitewashed, and it and the framework of the windows are ornamented with sundry choice specimens of literature. The apartment is nearly square; there are in it a couple of chairs near a brightly-blazing fire; a few plants are resting on one of the ledges of the many windows—vigorous shoots of fuchsia and geranium—and a watering-pot

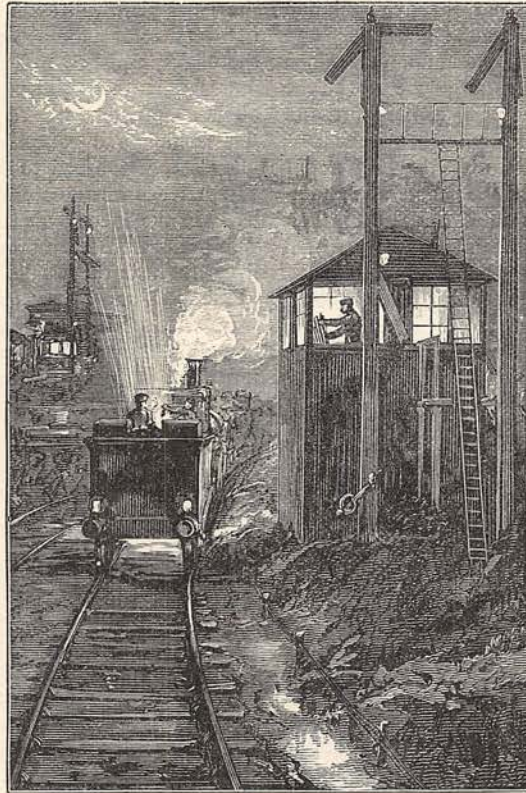
dangles from the roof; but beyond these and a few volumes the contents of the apartment are professional. After an almanack, and an engraving, the handwriting on the wall tells of notices of special trains, and other allied matters; bright-coloured "working time-tables" are there, mystic railway regulations, instructions, cautions, and rules abound, and it does not need the long row of variously-coloured levers to tell us that we are in a signal-cabin. From the windows we may see it plainly: before the eye finds the relief of trees that hem in the lines, it has to struggle through a mass of signal-staffs, with ugly arms extending, of lamps, of telegraph-wires, and other railway-side scenery.

Still more plainly is the fact told by the apparatus in the cabin—dull-painted gongs, magnetic instruments, and telegraph index. One side of the apartment is almost entirely occupied by the row of levers we have named—painted in various colours, and

bearing brass labels lettered with what at first seem mysterious words, such as "main dist.," "siding out," "junct. down," and others which acquire a meaning as the contractions are guessed at. The cherub, in short, is a stout able-bodied signalman, and his habitation is a signal-box at an important junction—or, rather, an important level crossing on two great lines of railway. Running over each other at right angles, and bearing

a mixed traffic—now goods, then passengers, and anon minerals—there is a frequent succession of trains, over the order of whose going this signalman is dictator.

It needs some time and a little observation to understand the movements of the signalman. Now there is a sounding on the gong, and in a few moments he has pulled back one of the levers; then he waves from an open window a coloured or white flag; now he reverses the lever, and pulls back another; and intermingling with this there is the sound of the tinkle of the bell, the puffing of passing engines, and the occasional boom of the gong. Now there rumbles by heavily and slowly a long goods train; then an express will rush past, and next a creaking old shunting engine will pant and snort along.



"A CREAKING OLD SHUNTING ENGINE."

All the time the arms of the signal-posts seem to be performing gymnastic feats for their own satisfaction, falling stiffly by the sides, rising horizontally, then falling part of the way, and always moving with them the coloured glasses which front the lamps that are now unlit. Patient investigation and a little homely explanation solve the mystery. The signalling machinery is Saxby's: when all the levers are at rest the signal-arms are raised so that all the lines to and from the signal-box are barred, and no engine should pass. By the telegraphic apparatus, the signalman learns the departure of trains from the station, or from the next point of observation—the "signal code" making clear to even the uninitiated, from the number of strokes on the bell, the point of departure, and class of the coming train. The levers are connected with the "points," which enable the trains to be shunted from line to line, and they are also connected with the signal-arms in

such an interlocked manner, that when the "points" are moved so as to allow a train to pass, the signal-arm necessarily falls, and the remaining arms keep up—barring the path until the first train has passed. With his time-tables, the signalman knows what trains to expect; with the aid of his telegraphs, he knows of the actual whereabouts of coming trains; and with his machinery of levers and flags, he must keep the line clear of less important trains until others have passed.

It is a busy scene. From the windows, you may glance down into the carriages of passing trains, may investigate the contents of loaded waggons, or may guess by the ancient and fish-like smell at those of others, though hidden from the eye. Nor is it devoid of attraction, for along the line, creeping as it does under bridges and through cuttings, and passing over embankments and bridges, there are glimpses of scenes varying in their beauty, colour, and nature; and to these the passing presence of the brightly-painted carriages, with the fitful puffs of grey smoke to show the progress of the locomotive, adds rather than lessens. But it is at night that the scene becomes spectacular. Then, from fire and flaring gas-jets, the cabin is illuminated, and the light is flung far into the darkness. The trees that crest a hill near are in one dark and indefinable mass, behind which the occasional twinkle of light in the town beyond may be seen, as the mass sways to and fro in the wind, and moans like the sea on a lone shore. Along the course of the line, on every hand, are stars of light at regular intervals, varied in shape of combination, and varied in colour—white, red, and bluish-green—forming the points of triangles, squares, and perpendicular rows; far off, long lines of light, equi-distant, pointing out the platform and the station. A river-side manufactory throws from its many windows a gleam of light down on the dark waters; whilst from the rolling-mills there spreads a halo of light, throwing into bold relief the cottages near, and rendering spectral in their

greyness the ascending streaks of smoke. Through this scene there dashes a stream of traffic: mail trains, lit until every compartment shows the sides to us as plain as in the day; slower-travelling "parliamentary" trains, with noisier cargo, excursionists venting their impressions of popular tunes; and less visible but, perhaps, more audible goods trains; engines, flying by like riderless steeds, and leaving fiery gleams in their track, long and dark lines of mineral waggons—are each in some shape grim reminders of the vast traffic which is ever rolling on across the narrow steel rails, in apparently endless confusion, but each marked, its time and turn assigned in the working time-tables, and each gauged, controlled, and directed over the domain he has charge of by the signalman. Still more shrilly, in the quiet night-time, rings out the tinkle of the bell; still louder seems to sound the boom of the gong, and the very rattle of the handles or the name-plates of the levers, as they rise and fall, convey a greater idea of their importance.

From conversation with the signalman, it appears that the cabins are divided into ranks, classified according to their importance as defined by the number of trains, or the amount of traffic; and this determination affects the pay of the signalmen, and the hours of their labour. In the typical cabin we have visited there are three signalmen employed, who divide the twenty-four hours equally, and so arrange their respective "shifts" of work that night-work comes equally to each of the three once in three weeks. As the number of trains of all sorts passing the signalman's cabin and needing his attention is, on the busier days of the week, close upon 300 in each "shift," the work of eight hours is by no means light—even physically. It does not vary much between day and night, the falling off in the passenger traffic at night being counterbalanced by the increased amount of heavy goods and mineral traffic. The post, therefore, of the signalman is none the less onerous because it is unseen, and the "cherub up aloft" has no sinecure.

## HIGHER EXAMINATIONS FOR WOMEN.



towards the close of the eighteenth century, and compare it with that now existing, what a contrast is at once apparent! What man of our forefathers a century back could ever have imagined that in the year of grace eighteen hundred and seventy-eight women would be competing *with* men

**I**F we were asked to give one of the great signs of the progress of the modern age, perhaps we could not do better than point to the present education and intellectual status of women. If in imagination we take even the most cursory glance at the education of women

on equal terms in public examinations, would in many instances wrest prizes for intellectual superiority out of their very grasp—aye, and in some cases work their way to the front ranks in the learned professions? Yet so it is. The dame-schools for the girls of the poorer classes, where they learnt to spell, and knit and sew; the home education of the middle and higher classes, with its elementary instruction, and its modicum of accomplishments—these are things of the past, and their place is now taken by Board schools in the first instance, and in the second by high-class seminaries and high schools, colleges—aye, and universities also—where lectures are delivered to women by learned professors representing the highest intellects of the day.

But it is with one feature only of this great change that we now propose to deal—the Higher Examinations for Women—excluding also all consideration of