

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/  
Couverture de couleur

Coloured pages/  
Pages de couleur

Covers damaged/  
Couverture endommagée

Pages damaged/  
Pages endommagées

Covers restored and/or laminated/  
Couverture restaurée et/ou pelliculée

Pages restored and/or laminated/  
Pages restaurées et/ou pelliculées

Cover title missing/  
Le titre de couverture manque

Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées

Coloured maps/  
Cartes géographiques en couleur

Pages detached/  
Pages détachées

Coloured ink (i.e. other than blue or black)/  
Encre de couleur (i.e. autre que bleue ou noire)

Showthrough/  
Transparence

Coloured plates and/or illustrations/  
Planches et/ou illustrations en couleur

Quality of print varies/  
Qualité inégale de l'impression

Bound with other material/  
Relié avec d'autres documents

Continuous pagination/  
Pagination continue

Tight binding may cause shadows or distortion along interior margin/  
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Includes index(es)/  
Comprend un (des) index

Title on header taken from:/  
Le titre de l'en-tête provient:

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/  
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Title page of issue/  
Page de titre de la livraison

Caption of issue/  
Titre de départ de la livraison

Masthead/  
Générique (périodiques) de la livraison

Additional comments:/  
Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below/  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X



AN ARCTIC GLACIER.

# Methodist Magazine and Review.

AUGUST, 1897.

## GLACIERS AND THEIR FORMATION.

BY C. E. PITFORD AND W. H. WITHROW.



THE HOME OF THE GLACIER.

To the thought of the average person the word glacier calls to the mind an irregular sheet or mass of ice, occupying the higher valleys of mountain regions, like the Alps, or the polar regions of the far North or South. The Swiss mountains have become famous for their glaciers, by their situation in the midst of that portion of the old world in which civilization, arts, travel, commerce, and education have their fullest development!

In 1827 Hugi built a hut on the Aar glacier, and began a series of researches into the character of glacial phenomena. It was known even to the less observing that the ice in the glacier had a sort of motion. It was also known that in some way, as the ice at the lower end of the glacier melted away, its place was supplied from above, and that in some seasons

the sheet of ice extended further down in the valley than at others, but it was apparently not known to any one that the ice motion was subject to any fixed laws.

It did not take a protracted investigation to prove that there was a regular movement of the ice, according to law, but several scientists joined Professor Agassiz in his investigations, among them being Professor Forbes, and the well-known Professor Tyndall, all working more or less independently.

A glacier, then, is a stream of ice, moving in obedience to the same laws, though much more slowly, as a stream of water. The source of supply is snow. Accordingly, the location most favourable for the production of glaciers is one where there are winds heavily laden with moisture coming in contact with currents

or objects that are cold enough to precipitate the moisture in the form of snow, and prevent it from melting after it falls. Such conditions are found in the Alps. The warm winds from the Sahara crossing the warm waters of the Mediterranean absorb so rapidly as to reduce that body of water much below the level of the Atlantic Ocean. Moving northward, these heavily laden winds encounter the lofty summits of the Alps, and the temperature of those high regions precipitates the greater part of the moisture in the form of snow. This snow does

cause some surprise when we remember that ice is so easily broken, but more careful thought will recall the bending of thin ice on a pond under the weight of a skater, or the peculiar mound of ice formed in a bowl of water that has frozen solid. Whether plastic or not, however, the movement of the ice mass is so fully what it would be if the ice were plastic that we can justify the use of pitch or molasses as an illustration of this movement.

#### FORMATION OF A GLACIER.

The laws of movement of this



SOURCE OF THE GLACIER.

not melt to any great extent, and as it accumulates it packs. Every one knows how a school-boy can pack a snow-ball until it is no longer snow, but ice. This, extended further, is precisely what the snow does on the Alps. At the top is snow; lower down is a white, granular mass, and still farther below it is ice; clear, solid, but with a bluish tinge.

The presence of the accumulated snow not only packs the mass into solid ice, but sets it in motion. The first conclusion reached after an extended study of glacial movement was that the ice is plastic. This statement may oc-

cur some surprise when we remember that ice is so easily broken, but more careful thought will recall the bending of thin ice on a pond under the weight of a skater, or the peculiar mound of ice formed in a bowl of water that has frozen solid. Whether plastic or not, however, the movement of the ice mass is so fully what it would be if the ice were plastic that we can justify the use of pitch or molasses as an illustration of this movement.

The laws of movement of this ice stream are the same as those of a river. On the bottom and sides the friction of the particles retards the movement of the mass, but as they are nearer to the surface and the centre the particles find themselves more free to move against each other than against the river bed. Accordingly, the slowest movement will be at the bottom of the stream, while the swiftest movement will be at the surface, and generally over the deepest portion. The same is true of the ice stream. Gazing from the summit of some neighbouring peak, we can see the long line of the ice river, with its branches

leading down from the surrounding mountains and uniting to form the main stream, which leaves the region of perpetual frost and con-

Along the edge of each stream is a dark ridge, formed by the rock fragments that have been broken off from frost and the

THE GREAT ALETSCHEK GLACIER, SHOWING MORAINES.



tinues down the valley into the midst of trees and grass-covered meadows, where flowers bloom, even at the very foot of the glacier.

weight of the superincumbent snow. These piles of rock are called moraines. Where two glacial streams come together, the

two inner moraines join in one, which thereafter occupies a line along the middle of the larger

the glacier comes to that point in the valley where it melts away as fast as it comes down from above.



CROSSING THE GREAT RHONE GLACIER.

glacier. This moraine is called a medial moraine, to distinguish it from the first kind, which is termed a lateral moraine. Finally,

In a series of years, where the snowfall is less and the cold less severe about the summits, the supply becomes less, and the

amount which reaches the lower levels unmelted is also less, so that the end of the glacier does not extend as far down the valley as it formerly did. In such a case there is exposed to view a great mass of boulders and gravel that had been brought down with the ice, and dropped when that melted away. This mass is called a terminal moraine.

the ice the subglacial stream that emerges later from an arched cavern—not clear and limpid, like the ice from which it came, but of a milky colour, from the fine particles of powdered stone which it has picked up in its course through the glacial mill. Yes, mill,—for it grinds the rocky bed, and, like the mills of the gods, it often grinds exceeding fine.



ABOVE THE  
GLACIER  
LINE.

#### GLACIAL CHARACTERISTICS.

At a distance, the glacier looks comparatively level, but a near view shows it made up of huge masses of ice with towering pinnacles and broken by yawning fissures, extending down often to the rocky bed below. Over the ice, at intervals, there flow streams of water from the melting ice, under the sun's rays, and anon these go roaring and plunging down into a crevasse, as such chasms are called, to join under

Though softer than rock, the ice river learned ages ago the simple principle of the emery paper, and, as it flowed sluggishly over the path opened before it, it laid hold, with all its enormous weight (6,480 pounds to the square foot for every 100 feet in thickness), and ploughed its way along, scraping, tearing, smoothing, and scratching the bottom of its bed.

Sluggish the movement undoubtedly is, with all its force. The estimated summer speed of

the Alpine glacier is, according to Professor Tyndall, not more than thirty-seven inches per day, or a little over a third of a mile per year.

An examination of the terminal moraine of one of these glaciers reveals the fact that the stones and boulders of its mass have under-



BEGINNING OF A GLACIER.

gone rough treatment, compared with which the polishing and grinding of the lapidary are merely atomic processes. Rolled over and over in their course, with the ever-shifting relations imposed by the alternate freezing and melting, the tumbling and breaking and reuniting of the enormous fragments of the glacier, these stones have been fractured and ground and chiseled in their journey until they may be as finely polished as marble, and covered over their surface with grooves from those that can be seen only with a lens to the larger and coarser that are measured in inches.

Stones and other debris which periodically fall down the mountains make a line along each edge of all glaciers. It is always considerably higher than the rest, because it preserves that ice under it from melting away. Isolated boulders, which have rolled far upon the glacier, always, unless their arrival be very recent, stand, for the same reason, on pillars of ice.

One of the best known glaciers in Switzerland is the famous

#### MER DE GLACE,

near Chamounix. After a climb of 3,000 feet, to the Mont au Vert, there bursts upon the sight a magnificent view of the motionless billows of the Sea of Ice, sweeping in a gigantic cataract down a lateral valley. One may trace its upward course for six miles—like a stormy sea frozen instantaneously into glittering ice. In its resistless onward glide it is rent into a thousand deep crevasses, descending to unknown depths. Just beyond this ice sea is a group of gigantic granite needles, one—the Aiguille Verte—piercing the sky to the height of 13,540 feet. No snow can rest upon their splintered



ON THE MER DE GLACE.

pinnacles. Thunder-scarred and blasted, and riven by a thousand tempests, they seem, like Prometheus, to defy the very heavens; and in their awful and forever inaccessible desolation were, I think,



the sublimest objects I ever beheld.

Leaving the beaten track, I strolled up the glacier, which

sapphire. I hurled my alpenstock into one, and after an interval it was hurled back as if by the invisible hand of some indignant ice



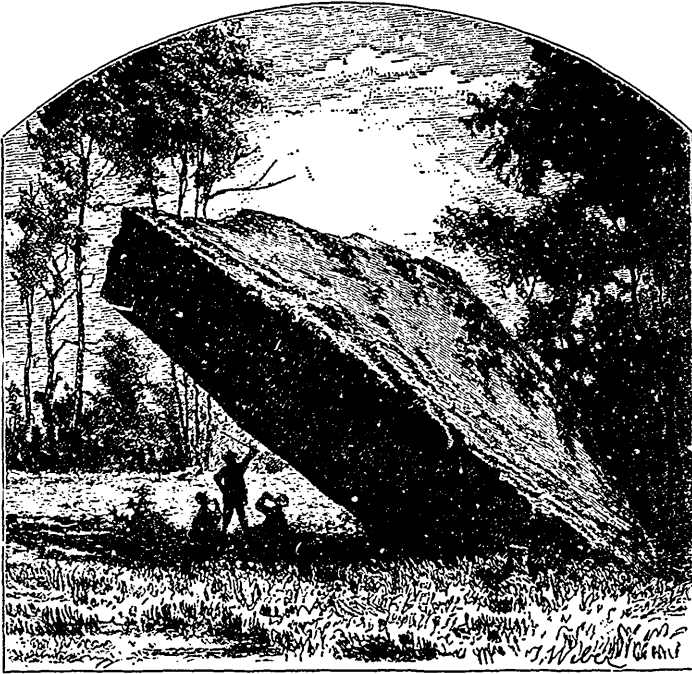
MOUNTAIN TARN FED BY GLACIER.  
The cross indicates the grave of some Alpine traveller.

rolled in huge ridges and hollows for miles up the valley. Many of the crevasses were filled with water—clear as crystal, blue as

gnome from the fairy grottoes of his under-world. Others were empty, but we could not see the bottom. The large stones we

rolled in went crashing down to unknown depths. Into one of these crevasses a guide fell in 1820 and forty-one years later his remains were recovered at the end of the glacier, brought to view by the slow motion and melting of the mass. His body was identified by some old men who had been the companions of his youth over forty years before. Along the margin of the glacier is a moraine

but iron rods have been bolted into the face of the cliff, so that it is now quite safe. The view of the splintered pinnacles, "seracs," and ice-tables of the glacier was of wonderful grandeur, and beauty. I suppose there was no very great danger, though it looked really frightful. We seemed to hang on the very "brink of forever." The poet's lines somewhat describe the situation :



GLACIER-BORNE ROCK.

of huge boulders, ground and worn by this tremendous millstone.

To reach the Chapeau one must pass along a narrow ledge, with steps hewn in the face of the steep precipice, known as the Mauvais Pas—the Perilous Way, or "Villanous Road," as Mark Twain translates it. The cliff towered hundreds of feet above our head, and sloped to a dizzy depth beneath our feet. This passage was once an exploit of much danger,

"And you, ye crags, upon whose extreme  
edge  
I stand, and on the torrent's brink beneath  
Behold the tall pines dwindling into  
shrubs,  
In dizziness of distance; when a leap,  
A stir, a motion, even a breath, would  
bring  
My breast upon its rocky bosom's bed  
To rest forever."

No words can give an adequate conception of the growing grandeur of the scene. In front rose the mighty dome of Mont Blanc.

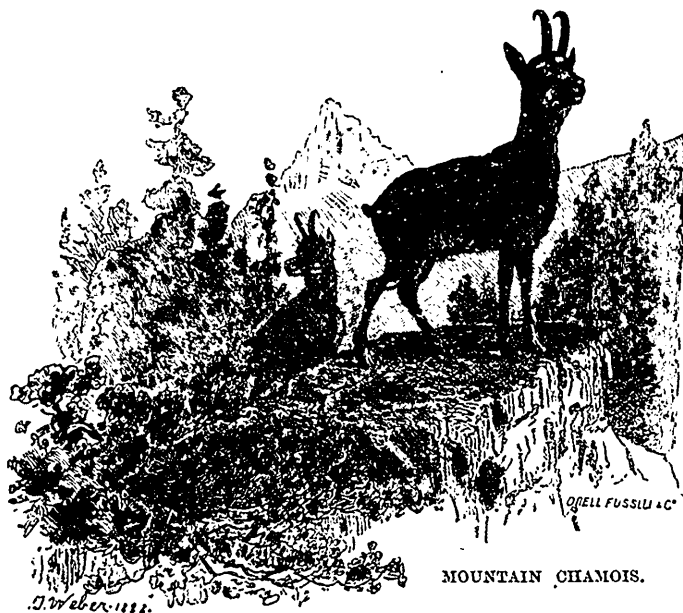
There it gleamed against the deep blue sky, like—so it seems to mortal thought—the great white throne of God in the heavens. The winding path, the deep ravine, the balm-breathing pines, the brilliant sun-lighted foliage, the fragrant mountain flowers—violets, harebells, anemones, and les clochettes, or fairy-bells, and little blue forget-me-nots—that swing their sweet censers in the perfumed air—it was like the Delectable Mountains in Bunyan's vision;

“O Sovran Blanc,  
The Arve and Arveiron at thy base  
Rave ceaselessly; but thou, most awful form,  
Risest from forth thy silent sea of pines,  
How silently.

Ye ice-falls! ye that from the mountain's  
brow,  
Adown enormous ravines slope amain—  
Torrents, methinks, that heard a mighty  
Voice,  
And stopped at once, amid the maddest  
plunge.

Motionless torrents! silent cataracts!  
Who made you glorious as the gates of  
heaven?

And who commanded (and the silence came)  
Here let the billows stiffen and have rest?



MOUNTAIN CHAMOIS.

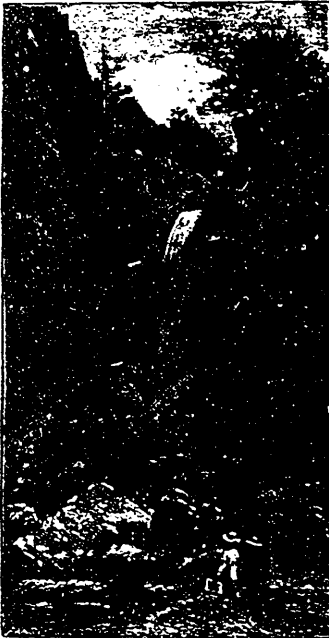
and the broad grassy valley of Chamounix gleamed in the distance like the asphodel meadows of the land which the pilgrims saw afar off. I descended the mountain, entered a huge ice-cave, and got well sprinkled with the falling water. From a vast arch of ice in the glacier leaps forth the river Arveiron in a strong and turbid stream, soon to join the rapid Arve. As we sat gazing on the sight, Coleridge's sublime hymn to Mont Blanc came irresistibly to the mind :

Thou, too, hoar mount, with thy sky-  
piercing peaks,  
All night long visited by troops of stars,  
Or while they climb the sky or when they  
sink ;  
Thou kingly spirit throned among the hills,  
Thou dread ambassador from earth to  
heaven—  
Great Hierarch! tell thou the silent sky,  
And tell the stars, and tell yon rising sun,  
Earth with her thousand voices praises God.”

The sublimest aspect of Mont Blanc, I think, is when illumined with the golden glow of sunset. It seems converted into a transparent chrysophrase, burning

with an internal fire. But, as the daylight fades, the fire pales to rosy red, and palest pink, and ashen gray, and ghastly white against the darkening sky. Through a strong telescope I could see the silhouette of a chamois goat sharply defined against the lighted window of the hut at Grands Mulets, five miles distant on the mountain slope.

In the afternoon, with a good glass—after sweeping up its successive zones of pine-forest, bare



GLACIER-FED WATER-FALL.

rock, glacier, and everlasting snow—I could see four black figures like emmets, which, I was told, were men climbing the mountain. But with all its grandeur, Mont Blanc will not compare with the immortal loveliness of the Jungfrau, the Virgin Queen of the Bernese Oberland.

THE GLACIER IN SONG.

Longfellow describes the glacier as the glittering gauntlet which the

Frost King has thrown in defiance of the Sun, and in the following fine poem Mr. L. L. von Roten finely recounts the associations of the mysterious river of ice.

The glacier slumbers in its rocky bed,  
And silence as of midnight reigns around,  
Save when from craggy cliff or mountain-head

A sudden tumult wakes the vast profound,—  
The avalanche sweeps wildly by,  
And sings the glacier's lullaby.

The mountain-peaks in stately circle wait,  
Like some proud monarch's lordly retinue,  
Bearing aloft a canopy of state,  
A gem-bespangled tent of deepest blue.  
O'er all this scene, so still, so vast,  
The moon her silvery light doth cast.

In silent meditation thus it lies,  
While night's refreshing breezes o'er it sweep,  
And all the starry eyelets of the skies  
As faithful sentinels their watches keep;  
Only at intervals a tone  
Is heard, that seems a hollow moan.

So lies the glacier in the place assigned  
By nature, like some mighty frozen stream:  
Heedless of flashing skies and blustering  
winds,  
It dreams in peace its tranquil, blissful  
dream—  
Of herdsmen's life on Alpine heights,  
Of heroes' deeds in freedom's fights.

The torrent welling from that icy breast,  
Leaping in thunder down the rock-strewn  
slopes,  
Battles its way towards the far-off West,  
Imparts to distant lands its dawning hopes,  
And whispers to the foaming sea  
The glacier's dream of liberty.

So spread the happy tidings far and near;  
Like some bright fairy tale that poets sing,  
To men whose cheerless lives are blank and  
drear

New springs of action and new joy they  
bring;  
The eager listeners hear a voice  
That bids their downcast hearts rejoice.

Soon with resistless force are swept aside  
Who fain would freedom's progress yet de-  
lay,  
And that glad voice, resounding far and wide,  
Proclaims of liberty the dawning day,  
Whose splendour now the highlands tints,  
And in bright hues the future paints.

And—as from out the glacier's deep recess—  
That once shall brighten to full light of day  
(Although by strife aroused and by distress)  
Which in the morning-red long hidden lay,  
Till triumphs, to the furthest North,  
What in that dream was shadowed forth.

The glaciers and snowfields cover a very considerable area of Switzerland. In the canton of Valais nine-tenths of the surface is either buried beneath snowfields and glaciers, or is uninhabitable, owing to its rugged and inhospitable character, being in part exposed to the frequent ravages of mountain-torrents, in part occupied by wild and romantic ravines and glens, or by extensive forests, many of which have never felt the woodman's axe. In the valleys a tropical heat reigns, in which grapes and almonds ripen; while on the mountain heights an arctic cold prevails, with icy winds sweeping over fields of never-melting snows.

The mountains, fields, and forests are the haunts of chamois, marmots, eagles, and various other species of wild animals and birds, while every summer the Alpine pastures afford grazing to numerous herds of cattle, from the milk of which large quantities of cheese are prepared. When the mountains let loose the piercing wintry blasts, when all the roads are choked with snow, and when with thunderous crash the avalanche rushes down into the valley, spreading terror far and wide—at such a time the wild grandeur of the Rhone Valley is revealed. The dwellers among these mountains and valleys must needs be a hearty race not to lose courage in the midst of these awful wildernesses; faith and confidence in God are needed, in order to persevere under such heavy toil and amid so manifold cares and anxieties.

Venez, an engineer of Valais, was the first who ventured to propound (in 1821) the bold and much combated theory of the former greater extent of the Rhone Glacier. He succeeded in demonstrating that not only the entire canton of Valais, but a much larger

district, comprising the basin of the Lake of Geneva, and extending to the Jura, was anciently one sea of ice, which even passed the crests of the latter mountains and descended far into the plains of France.

The principal glacier of the Alps is the great Aletsch Glacier, which surpasses all the rest not only in extent but also in beauty. In order to see it in its full extent we ascend the Eggishorn; a good bridle-path leads to the summit, which, though rising nearly 10,000



GLACIER-FED SPRING.

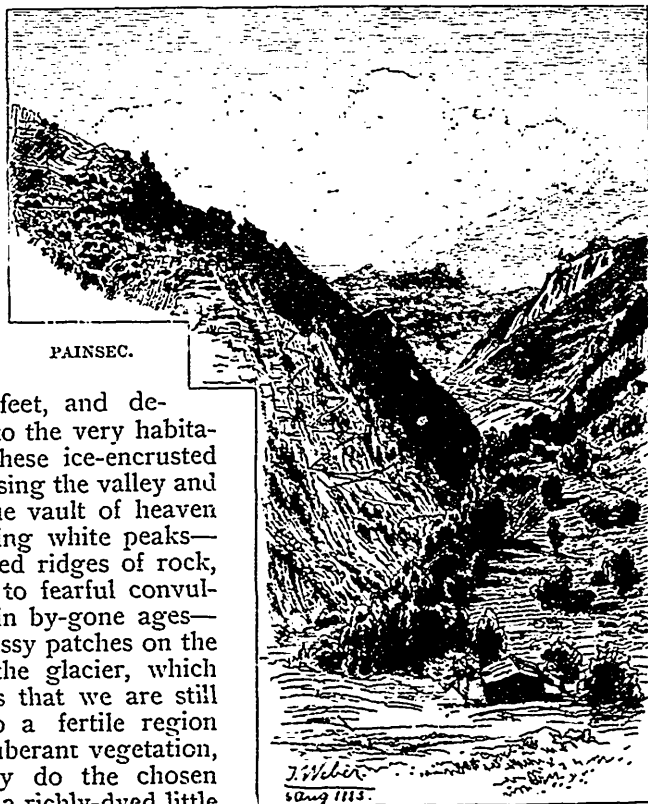
feet above the sea, is one of the most frequented spots in Switzerland. The stately trees find plentiful nourishment; it is easy for them to strike their roots deep into the moraines of long-vanished glaciers. Mountain torrents plough deep furrows in the loose earth and often carve it into fantastic forms, resembling castles and towers, and peopled by the poetic imaginations of the mountaineers with fairies and "Godwergi," or elves.

A walk over the Aletsch glacier, which, including its snow fields, is fifteen miles in length, while its average breadth is nearly a mile and a half, is of the greatest interest. The solemn and suggestive silence which reigns in this icy valley, and which is broken only by the sound of occasional falling stones or fragments of ice, and by the rushing of the glacier-stream—as well as the stupendous magnitude of this mass of ice, with its moraines and its countless fissures and crevices, filling the valley to a depth of who shall say how many hundred feet, and descending down to the very habitations of men—these ice-encrusted mountains enclosing the valley and cleaving the blue vault of heaven with their dazzling white peaks—these wild, jagged ridges of rock, bearing witness to fearful convulsions of nature in by-gone ages—these sunny, grassy patches on the very verge of the glacier, which alone remind us that we are still in proximity to a fertile region decked with exuberant vegetation, forming as they do the chosen habitat of many a richly-dyed little mountain flower—all these remarkable, wonderful, and grand attributes combine to form a picture which impresses itself upon the mind and imagination of the traveller in ineffaceable outlines. The pigmy-like figures on the glacier, shown on page 102, will be noticed.

It is exceedingly impressive to walk over the glacier, to leap boldly over the numerous crevices, pass with due caution around the

seracs (blocks of ice) that threaten to topple over, to admire the numerous "glacier tables," and to listen to the brooks, called "glacier mills," which are lost to sight in the azure depths—and linger wonderingly as though we were transported to another world!

A symbol of perfect purity, the glacier tolerates no foreign matter



PAINSEC.

GLACIER-GROOVED VALLEY IN  
THE VALAIS.

within its vast body, but ejects it again. It breaks its way with irresistible force, and pushes aside whatever opposes its advance. Is it therefore to be wondered at, that in the old poetic days, when spirits played so great a role, these fairy-like palaces and subterranean habitations of crystal were peopled with "ice queens" who, surround-

ed by their "glacier maidens," reigned over the immense glacier realm? St. Barnabas, according to a local legend, is said to have preached to the people of the Valais, as St. Peter is said to have visited the St. Bernard Pass.

While the study into the laws of glacial movement in Switzerland were very satisfactory and reasonably complete, they were nevertheless somewhat narrow in their scope. Although better known by reason of their accessibility, and their position along one of the most important routes of travel in Europe, the Alps glaciers are only a few among the very great number of glaciers in the mountain regions of the world, and they are very small as compared with the glaciers of several regions in both hemispheres.

#### TROPICAL AND SUB-TROPICAL GLACIERS.

The mountain glacial regions may be found even in the tropics, the conditions being high altitude, sufficient breadth in the mountain ranges to afford room for the development of glaciers, of currents of moist (therefore comparatively warm) winds to furnish the amount of vapour necessary to make glaciers. The Pyrenees have altitude, but not breadth. The Urals have altitude, but lack in breadth and moisture. The mountains of Scandinavia have all these, and the glaciers of that country sometimes cover an area of 700 square miles. The Caucasus, the Himalayas, and the mountains of New Zealand in the old world, are well supplied. In the new world the Andes, from Ecuador to Patagonia, have glacial regions, and Darwin, in his account of the voyage of the Challenger, describes glaciers several miles in length that came from the mountains of Terra del Fuego, even to the sea.

In North America the glacial

region begins on a small scale in California, where, in the Toulumne Mountains, are a few small glaciers not exceeding a mile in length. Mount Shasta, further north, furnishes more respectable specimens in this line. Still farther north, Mount Ranier, or Tacoma, has sixteen or more of these icy rivers, varying in size from about four or five miles in length, and a mile or more in width, down to one-half mile in length and a quarter of a mile wide for the smallest.

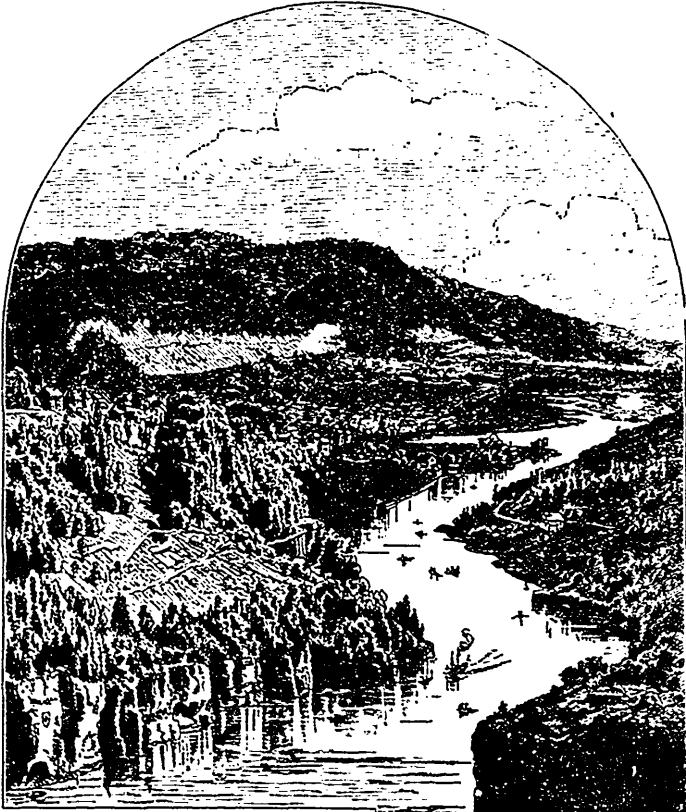
In the Canadian Rockies are some magnificent glaciers. In one of these the ice is said to be 800 feet deep.

Glacial action has grooved out many of the lakes and valleys of Switzerland and other countries, and has transported enormous blocks of stone to great distances.

Ancient moraines in abundance denote former presence of glaciers among the mountains of Wales, the Alleghanies, and other chains now free from snow. They do not necessarily show that the climate once was colder, for moisture as well as cold is needed to make glaciers, and the drying up of such a source as that region in Sahara, which it is now proposed to flood, would amply explain why Soracte, Parnassus, or other European mountains, described by ancient writers as snow-clad, are at present bare.

#### ARCTIC GLACIERS.

When the Alaska line is crossed there develops very speedily a most remarkable series of glaciers descending from the loftier heights of the Rocky Mountains along the coast, which have caught and frozen the copious moisture of the winds that blow over the Japan current toward the land. From the southern boundary of Alaska to the Aleutian Islands is found a continuous chain of glaciers,



GLACIER-CUT VALLEY AND LAKE.

very many of them descending to the sea, and breaking off into icebergs.

The glaciers here give us a far grander view of the forces of nature than do those of the Alps, but in order to have some real conception of glacial possibilities we may visit with some exploring expedition the great polar ice sheets. Professor George F. Wright, who has devoted considerable study to the Muir glacier, says: "The main body of the glacier occupies a vast amphitheatre with diameters ranging from thirty to forty miles. Nine main streams of ice unite to form the grand trunk of the glacier. The width of the ice where the glacier breaks through between



the mountains is 10,664 feet, but the water front is only a mile wide. The central part of the mass moves more rapidly than the sides, and is projected about a quarter of a mile beyond the corners. The front of the glacier is 250 feet high at the extremity of the projecting angle. Great masses of newly-born icebergs float about the bay,



the sport of wind and tide. Their size can be imagined when one reflects that it is usually estimated that seven-eighths of the bulk of an iceberg is beneath the water. A stream of ice presenting a cross section of about five million square feet, that is 5,000 feet wide by 1,000 feet deep, is entering or falling into Glacier Bay at an average rate of forty feet per day. This would give 200,000,000 feet of ice per day falling off during the warmest month of the year.

On the eastern side of our continent we find a great subcontinental island over five hundred miles in length, which is inhabited to a slight extent along the south-

ern coast, but whose northern portions are still an unknown land. It is pretty certain that the interior of that land is covered with a sheet of ice from a thousand to six thousand feet or more thick. The great Humboldt glacier of Greenland, north of 79 degrees 20 minutes, has a breadth at foot, where it enters the sea, of forty-five miles. Passing toward the interior, Nordenskiöld states "that not a plant or stone or patch of earth is seen over the great ocean of ice and snow twelve hundred miles in extent from north to south and four hundred miles in breadth."

---

### WATCHING.

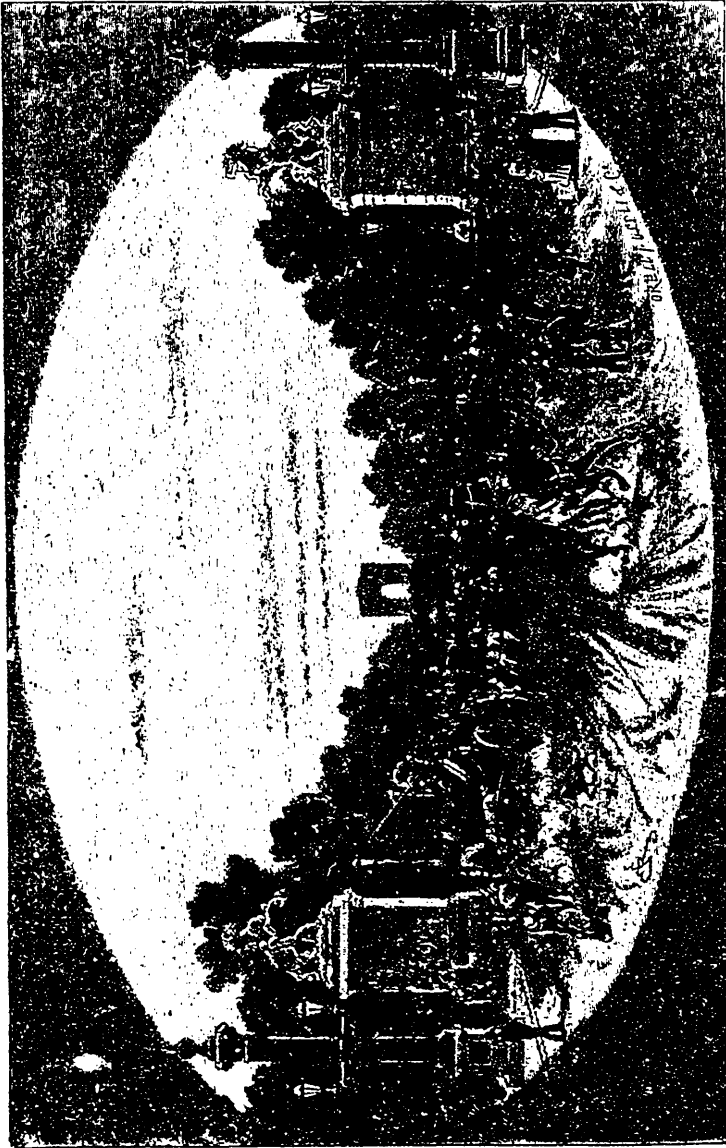
BY AMY PARKINSON.

Jehovah sleeps not. When from darkened skies  
Fall shadows of the night, tired mortals seek  
For rest in slumber. But Jeshurun's God  
Nor slumbereth nor sleepeth. Constantly  
He watches o'er His people.

Sweet the thought  
To them with duties of the day grown weary—  
That they in safety may lie down and sleep  
Since He doth guard. And sweet, indeed, to them  
Who have in suffering passed through daylight hours,  
And are more weary still—the knowledge is  
That though they, waking, the long night must spend,  
The Lord, the Lord Himself, will share their vigils.

Then, whether unto us the lot hath fallen  
With these or those, O let us be content!  
And if in calm repose, 'neath His protection,  
The hours of darkness pass,—see that we render  
To Him our heartfelt thanks; or if, instead,  
We wake and suffer,—while He wakes to soothe,  
Praise, praise Him still! yea, even with joy endure  
The weakness or the pain which makes us cling  
More closely to His breast. (For not alone  
Doth He keep watch above us, but doth bend  
And gently fold within the kind embrace  
Of His most tender arms.)

And soon we shall  
With Him ascend where pain and weakness are not—  
Never again to feel, as now, the need  
Of taking rest in sleep.



THE CHAMPS ELYSEES.

## THE WHITE FIELDS OF FRANCE.\*

BY THE REV. THEO. J. PARR, B.A.



PORTE ST. MARTIN.

## II.

Young McAll was an enthusiastic lover of nature, and a clever botanist. At thirteen years of age he drew plates of his botanical investigations, and in 1837, when he was but sixteen, there appeared one of his published works: "Nine excursions near Southport, Lancashire," by R. W. McAll, author of "Three Tours in Wales," "Studies of Nature," etc. There are six illustrations in water-colours, drawn on the spot. Such achievements show both his thirst for knowledge, and his artistic taste.

At the age of seventeen, he solemnly dedicated himself to God, to be used of Him according to His will. The terms of his con-

secration are both pathetic and noble, and reveal the deep piety of his heart. Here is reproduced a part of his religious vow, in the exact words: "O Almighty and Eternal God, I acknowledge that there is no other way whereby I can be rescued from my ruin but through thy Son, Jesus. Hereby I solemnly accept of His salvation, declare my determination, assisted by divine strength, to place my hope upon Him alone, and to enter an absolute, interminable war with my sin. My powers, O God, would I now devote to thee; take them as entirely thine—this is an infinite privilege, to be a servant of the King of kings, much more a son. I yield myself, merciful Father, to thy disposal forever. Do with me whatever shall most conduce to thine own glory, and my everlasting happiness. I, in a word, make a solemn and entire surrender of myself, with all my powers, to thee—thee alone, thee forever. Accept, accept, Lord, of me. Increase my faith, renew my love, elevate my motives, purify my desires, fix my thoughts on heaven. . . . I entreat all in the name and for the sake of my dear Redeemer, and in His strength form these solemn resolutions. Amen and amen."

With his subsequent history before us, we can readily see how this pledge, marked by such sanctity, became the spirit of the plan and progress of his enduring life-work.

After the death of his father, the son qualified for an architect in Manchester, exhibiting again his great versatility of mind. He completed the term of his articles, and pursued for a time his profession with undoubted success.

\* The writer is indebted in the preparation of this article chiefly to "The Life of Robert Whitaker McAll," by his wife, and "The Story of the McAll Mission," by Horatius Bonar, D.D.

There exists an album of exquisitely finished specimens of architectural drawings in the English style designed by himself, which reflect his taste and genius. He designed a number of churches,

architecture of character to which he was to be called. And his switching from one line to the other was suddenly accomplished. He himself tells of the transition in a few words :



A. F. Beard, D.D.      M. Saitens.      Dr. McAll. Mrs. McAll.      Rev. W. W. Newell.      Rev. C. E. Greig.  
M. Reveillaud.      Mrs. Newall.

DR. McALL AND HIS HELPERS.

among which are Ebenezer Chapel, Sunderland; London Road, Leicester, and Abbey Road Congregational church, Torquay.

It was not, however, the architecture of buildings, but rather the

“ While I listened to the sermon, I meditated and virtually resolved upon an entire change in respect to the aim and business of my life. In short, a resistless desire arose, soon forming itself into a change-

less purpose, to relinquish a profession adopted from intense fondness, and for which I had secured the needful qualifications, and to enter afresh upon a preparatory course with a view to the Christian ministry."



STATUE OF THE BOY LUTHER.

In pursuance of this determination, he entered the Lancashire Independent College, as a student; and while there was a merry side to this college life, as there always is; while "quips and cranks," or "laughter holding both his sides," were not wanting; still, as a student, McAll was very constant and

diligent, always standing well in his classes, and having a special facility in expressing his thoughts, whether in conversation or in written discourse, and looked forward with ardour to his work as a Christian minister.

It seems strange to know that he was of a very sensitive nature, when we think of his aggressive work among the "rough and ready" classes of the faubourg of Belleville. His first charge in the ministry was at Sunderland, where his life ran through seven eventful years, and long after, in France, his heart often yearned for the good folk of Sunderland, and his fervour of affection for his first pastorate never passed away. From Sunderland he went to Bond Street Chapel, Leicester, and successively to Manchester, Birmingham, and Hadleigh, always welcomed when he came; always regretted when he bade farewell.

His ministry during these years of settled pastorates was unpretending, because Mr. McAll could not be pretentious. It was simple, but with the simplicity which wide culture, a careful exegesis, and a thorough grasp of his subject, brought. Above all and beneath all was his love for men, and his desire to bring them to the Crucified One as their Saviour and Lord, in whom alone can be felt the true Fatherhood. He was not a sensationist. His intense earnestness, his profound conviction of the truth, his ardent desire to secure the acceptance of his message by his hearers; these, with a life and conduct marked by the utmost purity, devotion, and loving self-sacrifice, were the means he used and the arts he employed to attain the success which marked his ministry.

The same characteristics he took with him when he crossed the Channel to thrust the sickle into the harvest that awaited him in

"The White Fields of France." We can scarcely imagine Dr. McAll preaching sermons of great length, without a denial of his early predilections. When he was a lad, his father had an assistant in his Church work. One Sabbath, the assistant preached, much to the delight of young Robert, for when the youth returned home, he said to his father: "Oh, papa, I wish you would let Mr. Leigh preach

founder by his friends, together with a timepiece, surmounted by a bronze statuette of "Luther, singing for his bread," purchased by penny collections in the different halls. And an album, with over five thousand signatures, and letters of loving congratulation from a hundred and twenty-five halls were eloquent tributes of honour and appreciation.

He was planning for the further extension of the work so dear to him, when his strength began to fail, and the end was at hand. When it came, like a child folded in his mother's arms, so he fell asleep, for the Saviour Himself drew near and left his seal on lip and brow—a smile—a flower dropped from heaven's gate. Such was the peaceful close of a consecrated life on Ascension Day, May 11th, 1893.

"The evil that men do lives after them;  
The good is oft interred with their bones."

Not so with Robert Whitaker McAll. His good works live after him. Few men have accomplished such permanent results of blessing as this man wrought out from his fiftieth to his seventieth year. What he began as a modest service, given with hum-

ble joy to a neglected class in Paris, he saw grow into a great organized work, holding most important relations to the wide needs and growing progress of a great nation. Dr. McAll sometimes wore two distinguished medals of honour. One of these was given him by the city of Paris; the other by the President of France. They were official municipal and national decorations, in recognition



REV. GEORGE THEOPHILUS DODDS.

always. Why don't you?" "What makes you say so, Robert?" "Oh, papa, because he is so short!"

Dr. McAll's work in France was twenty years old in January, 1892, and this coincided nearly with his seventieth birthday. Special meetings were held in Paris to celebrate the event in a fitting manner. A purse, containing a handsome sum, was presented to the distinguished

of his great services to the city and nation, a recognition of a Protestant pastor probably unparalleled in France since the work of Oberlin.

God gave McAll to France, as he gave Luther to Germany, and Savonarola to Italy, and no one can read his life, from the time that cry came to him on the outer boulevards of the classic capital of France to the last report of the work done, but must be convinced that he had faithfully fulfilled the ministry which God entrusted to his care.

Mr. Monod has forcefully pointed out three moving principles in relation to the labours of this remarkable man :

1. If you desire to accomplish great things for God, do not try to make a great beginning. Let your concern be to do faithfully whatever the Master sets before you.

“ Work for the good that is highest,  
 Dream not of greatness afar,  
 That glory is ever the highest  
 Which shines upon men as they are.”

2. Serve God only. How few give to God the whole of their heart and life. What strikes one most in this Anglo-Saxon apostle is the thoroughness of his consecration.

3. We must always be at God's disposal. When God said to Dr. McAll, as to Abraham, “ Get thee out of thy country, and from thy kindred, and from thy father's house,” he was over fifty years old. He had an excellent position, as a beloved and honoured pastor; he might well have pleaded to be excused from undertaking a work so full of uncertainty, and leaving a position so full of usefulness and promise. But having recognized the voice of God, he hesitated not, and France is better, and the world is better, for the grandeur and devotion of his life and work.



MISS ELIZABETH R. BEACH.

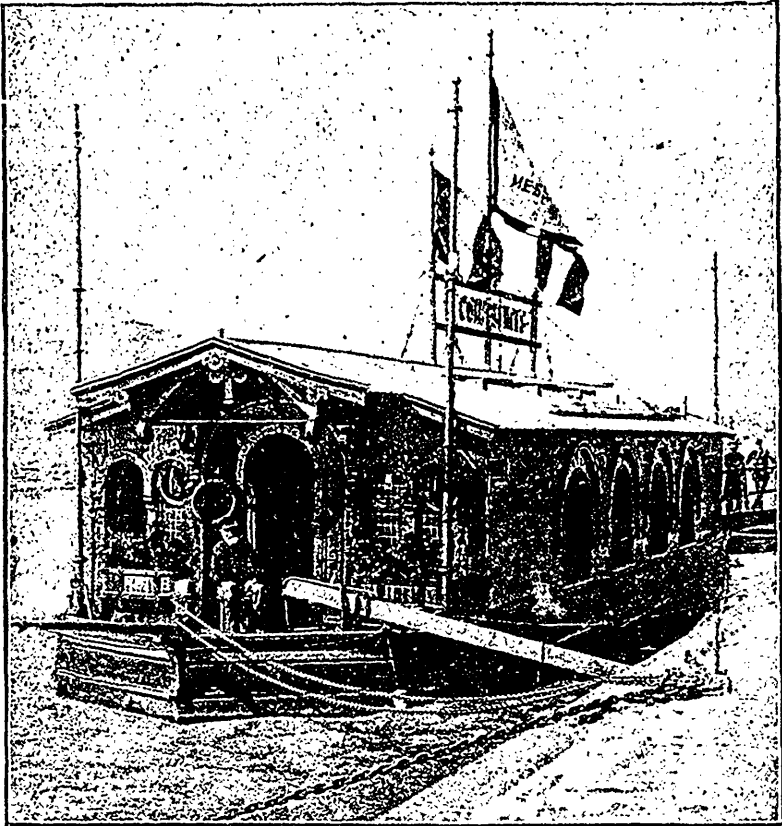
“ Mother Earth, are the heroes dead?  
 Do they thrill the soul of the years no more?  
 Are the gleaming snows and the poppies red  
 All that is left of the brave of yore?”

“ Gone? In a grander form they rise!  
 Dead? We may clasp their hands in ours,  
 And catch the light of their clearer eyes,  
 And wreathe their brows with immortal flowers.”

“ Whenever a noble work is done,  
 'Tis the pulse of a hero's heart is stirred;  
 Wherever the truth has a triumph won,  
 There are the heroes' voices heard.”

From the latest report of the McAll Mission to which we have access, we add the following information of the spread of his work into other parts of France :

The expansion of the work into different cities has been, like all the rest, most natural and providential. M. Ruben Saillens, a native Frenchman, had been moved to give himself to missions, and led to become a regular minister. At Lyons he came in contact with Rev. H. Grattan Guinness, and following him to London, entered the East London In-



THE MISSION BOAT, "LE BON MESSAGER."

stitute, founded by M. Guinness, for the training of evangelists. In a vacation visit to his parents in Paris, he visited, Christmas Day, 1873, one of the halls of the McAll Mission, and subsequently became a regular helper in the work. In 1876 he was conscripted for military service, and spent his twelve months in the city of Marseilles, and found there a reading-room and Sunday-night meeting for workmen, founded by Mr. and Mrs. George Pearse. The eagerness of the people to come to this meeting suggested to him the bringing of the McAll Mission, hitherto confined to Paris, to the provincial cities also; and in 1878 he led in opening the first McAll Mission in Marseilles; and three months later a second hall in another quarter of the city, which was thronged with earnest attendants, and left most permanent and blessed results. Such was the beginning

of the work in Marseilles. In 1878-79 Mr. McAll and Mr. Dodds started five stations in the city of Lyons. Since then the work has extended, always in the most natural way, into many French cities, and even to Corsica, Algiers, and Tunis. A map of missions, published in the report of 1894, is necessarily a map of all France, and reaches across the Mediterranean to the French colonies in Africa.

An interesting means of working has been the mission boat, *Le Bon Messenger*. Mr. Henry Cook brought to Paris in 1890 a small boat named the *Herald of Mercy*. This enterprise was attended with great blessing, and the boat was taken down the river to Le Havre, and in the following summer visited Caen, in Normandy, where great interest was awakened, resulting in the opening there of a permanent evangelistic hall.

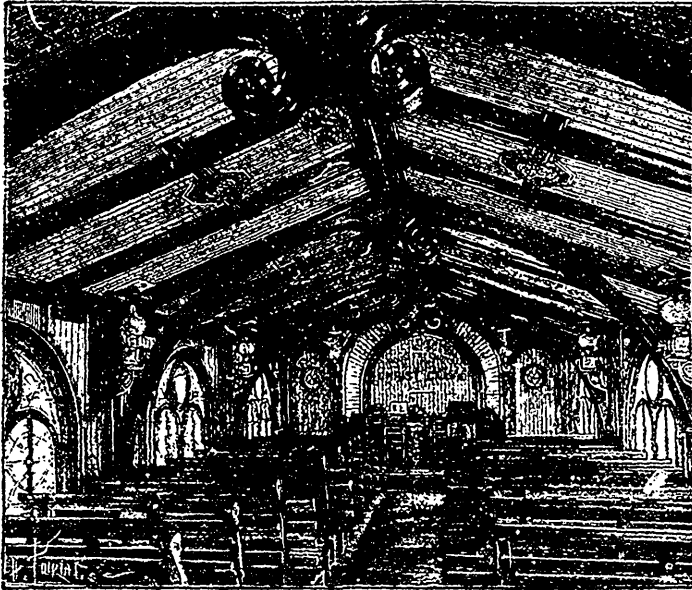


That year was published Mrs. Louise Seymour Houghton's fascinating volume, "The Cruise of the *Mystery*," a work of fiction only in its slender thread of personal story, but of simple fact in its moving incidents of spiritual experience. This work foreshadowed what it was meant to plead for, and its idea has been actually carried out with signal success.

The iron hull of *Le Bon Messager* was built at Argenteuil, on the Seine, and was finished above as a floating chapel with accommodation for about one hundred and fifty persons. It was moored to the Quai des Tuileries, April 2nd,

saries were opened in connection with the mission in Paris. A soldiers' reading-room was also carried on.

Perhaps more was done to interest American Christians in the cause by Miss Elizabeth Rogers Beach than by any other agency. Miss Beach was the daughter of a New England clergyman, and went to France to fit herself for the professorship of the French language in a female college. She there became interested in the McAll Mission, and, as her studies permitted, engaged in its work; and after her return to America, she declined a flattering invitation to a



INTERIOR OF MISSION BOAT.

1892. Daily services were held through the month, and April 30th the boat was towed out of Paris and into the Marne, where services were held in many places during the summer and fall. The winter of 1892-3 was spent at the town of Meaux. A second cruise began in May, 1893. In these cruises meetings have been held in many places otherwise unlikely to have been reached, the way has been opened for several permanent mission works in different towns, and the new form of work has brought forward a number of new workers.

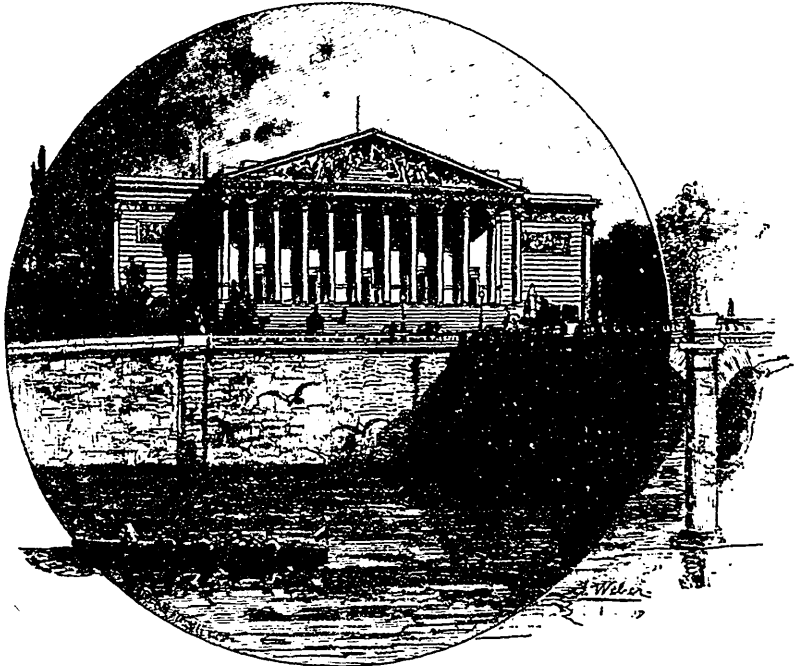
In 1886, through the generosity of friends in Edinburgh, two free dispen-

saries were opened in connection with the mission in Paris. A soldiers' reading-room was also carried on. Perhaps more was done to interest American Christians in the cause by Miss Elizabeth Rogers Beach than by any other agency. Miss Beach was the daughter of a New England clergyman, and went to France to fit herself for the professorship of the French language in a female college. She there became interested in the McAll Mission, and, as her studies permitted, engaged in its work; and after her return to America, she declined a flattering invitation to a professorship in Smith College, determining to go back to France. In personal conversation on the subject with Rev. Dr. L. T. Chamberlain, then pastor at Norwich, Conn., she showed such eloquent knowledge of the work that he persuaded her to tell of it to his people; and this led to her telling the story in many places. In January, 1884, she sailed for Savannah, in the steamer *City of Columbus*, with good hope of a return of health, but was lost in the wreck of that unfortunate vessel. The impression of her devoted life rested very strongly upon the work; and, besides the establishing of the auxiliary work in the

United States, a new station was established in Paris as a memorial of her, and was called by her name.

Mr. Greig, as Dr. McAll's successor, reported, in 1894, 119 mission halls, with twenty-two in Paris, and sixteen in

its environs, while the receipts for the year 1894-95 for the prosecution of the work amounted to \$80,820, of which \$31,780 came from the United States, and \$26,730 from the United Kingdom. Merritton, Ont.



BOURBON PALACE.

---

### THE POOR.

They gather yet in field and town and city,  
The people discontented, bitter, pale;  
And murmur of oppression, pain, and pity;  
An old-time wail.

Old? Yes, as old as Egypt; sounding slowly  
From naked millions in the desert hid,  
Starving and bleeding, while they builded slowly  
The Pharaoh's pyramid.

As old as the Dark Ages. The lean peasant,  
Numerous, patient, still, as time went by,  
Made his lord's pastime less than pleasant,  
With that unceasing cry.

It grew in volume down the crowding ages;  
Unheeded still and unappeased it swelled;  
And now it pleads in pain, and now it rages.  
The answer still withheld.

## THE APPIAN WAY, AND FOOTPRINTS OF ST. PAUL.

BY THE EDITOR.



POZZUOLI (PUTEOLI), ITALY.

## I.

All Christendom is this year studying the life and character of the great Apostle of the Gentiles as it never did before. His record and writings, as given in the Acts and in his Epistles, form the subject of the International Sunday-school Lessons which some fourteen millions of teachers and scholars in every land beneath the sun are pondering week by week. This fact will lend a special interest to a brief record of the associations of St. Paul with the great Roman highway by which, not as a triumphant conqueror, but as a culprit in chains, he reached the gates of the Imperial City.

Yet, though dwelling a prisoner in Rome, first for a time in his own house, and afterward, there is reason to believe, in the Mammer-tine dungeon, his was the freest soul in the wide empire. The cruel monster, Nero, before whom

he was arraigned, was indeed the slave of his own vile passions, and ended a cruel life by an odious death. The manacled prisoner who stood at his bar is aureoled forever with the glory of the confessor and martyr of Jesus; and his name, behold it is alive forevermore. His influence rolls on in ever widening circles, moulding the life and thought of Christendom in every land unto the end of time.

We avail ourselves of every source of information as to Paul's journey to Rome and the memories of the Appian Way. In an admirable monograph on "The Footprints of St. Paul," the Rev. Egerton R. Young thus writes of this historic highway :

The Appian Way was the principal road running southward from Rome. It was built during the censorship of Appius Claudius, B.C. 312. The stones, which were of very hard material, and

highly polished, were so cut in corresponding angles that when placed in position, they fitted together, and were provided with such an admirable foundation, that they lasted for many centuries. The secretary of Belisarius tells us that in his days, "after nine hun-

seenied. The heroic man, the "prisoner of Jesus Christ," bound with chains, in company with other prisoners, guarded by stern Roman soldiers, on his way to a glorious martyrdom. The hot Italian sun scorched him, its fierce glare blinded him, the driving dust



POZZUOLI (PUTEOLI), WITH REMAINS OF ANCIENT PIER.

dred years of wear, they still remained unmoved." Over this ancient highway the greatest man of all the ages, as a prisoner, trudged, footworn and weary, along its polished surface.

As we rode along this historic road, how strangely real it all

choked him, the rabble jeered and mocked him; but what cared he for these things? There is a light in his eye, and a joy in his soul, and a longing in his heart, and so his step has in it the swing of victory. He sees before him the near realization of what had

long been a consuming desire, "to preach the Gospel in Rome also."

Puteoli, in the Bay of Baiæ, where Paul landed in the month of June, 62 A.D., after his eventful voyage from Caesarea and shipwreck at Melita, or Malta, is about one hundred and seventy miles from Rome. There, the kind-hearted centurion, now in all probability a Christian, responded to the request of Paul's brethren,

world. Its very loveliness makes the colossal crime of which it was the scene more horrible. Here the infamous Nero made his attempt to drown his mother, Agrippina, by the wrecking of a pleasure barge at a fete given in her honour.

On a glorious summer day the present writer visited this memory-haunted spot. The view from the rocky Cape Misenum was superb—the lovely Bay of Baja, in the offing the volcanic islands of the



TEMPLE OF NEPTUNE, PAESTUM, NEAR NAPLES.

Paestum, so named from Poseidon or Neptune, was settled by the Greeks six hundred years before the Christian era. The temple is 200 feet by 84 feet, and is one of the most impressive remains of Greek architecture.

and allowed them the seven days' rest to which St. Luke refers in Acts xxviii. 14. The ruins of the old wharf, or quay, on which St. Paul landed, are still to be seen.

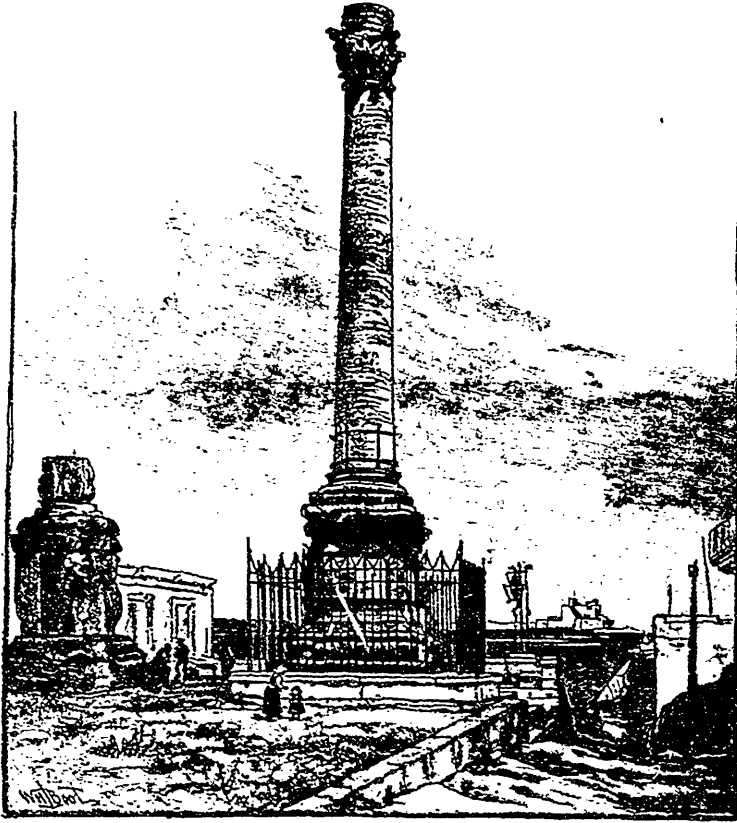
"Nothing in the world," says Horace, "can be compared with the lovely Bay of Baiæ." Even in its ruinous state this once gay Roman pleasure scene deserves all the praise that can be given it. The whole region abounds with ruins of the temples, palaces and villas of the ancient masters of the

Procida and Ischia, and at my feet a gloomy lake in an old crater, called Mare Morto, the Sea of Death.

Puteoli is thus described by Dr. Cunningham Geikie :

In Paul's day, Puteoli was the first commercial city of Italy, with huge docks and a great pier. Sixteen buttresses—three of them now completely under water—are still left of the many which supported its twenty-four arches.

To this Liverpool of antiquity



COLUMN MARKING THE END OF THE APPIAN WAY, BRINDISI.

the merchant fleets of the whole world made their way. Inscriptions show that Tyre had business relations with it on a scale which required a regular trading factory, and that many mercantile houses of Berytus—our Beirut—had branch establishments in it. It was the depot of the iron ore of Elba, and the Spanish and African trade was immense; but its greatest commerce was with Alexandria, and, through that port, with the East.

There was, indeed, an Alexandrian colony in the city, by whom oriental worship was early introduced, especially that of Serapis, their favourite deity. Streams of worshippers would

throng the sacred space when Paul's ship sailed in, to thank the god for its safe voyage, but it is striking to think that, while the Cross, then so despised, has now ten thousand temples in unnumbered lands, the paganism so triumphant in that day is represented only by deserted ruins. From Puteoli, Caligula had stretched his roadway, supported by vessels, across the waters to Baiae, that he might be able to say he had ridden upon the sea as if it were dry land.

From Puteoli, it was 170 miles to Rome, and the journey was to be on foot, unless, indeed, advantage was taken of the canal through the Pontine Marshes to lighten part of the way. The

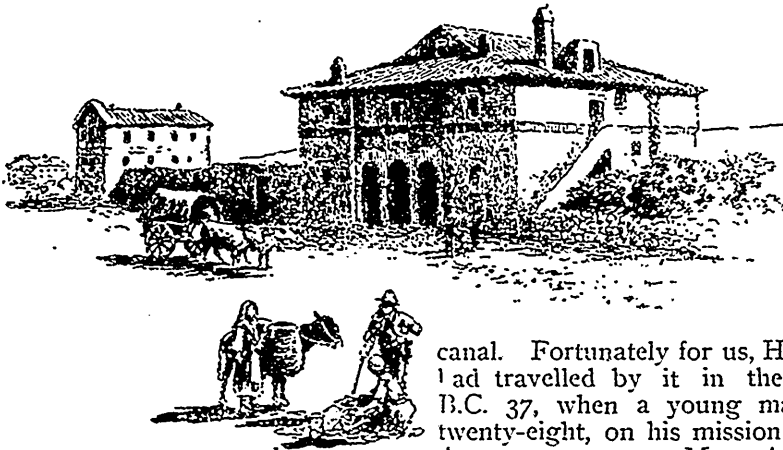


LANDING-PLACE AT APPII FORUM.

first stage was to Capua, about twenty miles to the north-east, along the Campanian Way, through the richest district of Southern Italy.

At Capua, the prisoners reached the Appian Way, or great south road, from and to Rome, originally ending at Capua, but continued, before the time of Horace, across the country, more than two

miles, the accumulation of sand on the sea-shore, and the lowness of the land behind, damming back the streams from the mountains. A canal ran through this long morass, with at least a mule-track alongside; for the canal boats were drawn by mules. Perhaps Paul and his companions marched by this path, but it is more probable that advantage was taken of the



THE THREE TAVERNS.

hundred miles, to Brundisium, the great sea-port of south-eastern Italy. This road led from Capua, by a course of 151 miles, to Rome, bending towards the coast, which was reached at Terracina, half-way to the great city. Here began a long, swampy stretch of thirty

canal. Fortunately for us, Horace had travelled by it in the year B.C. 37, when a young man of twenty-eight, on his mission from Augustus, to meet Marc Antony at Brundisium, and has left us the story of his experiences in his Fifth Satire.

The first day's journey from Rome, on the Appian Way, was, usually, to Appii Forum—the market-town of Appius—forty-three miles from the city gates. It was a little town, with inns, and the offices connected with the

canal trade—a place which Horace describes as “stuffed with sailors and surly landlords.”

Paul, a much higher type of man than either the bright, elegant

to him, for the news of his approach had preceded him, and a number of Christians from Rome had walked out the forty-three miles, to meet and welcome him.

Striking to say, the forty-third milestone, and some fragments of ruin, are now all that remain of the town; but the charms of a canal-head are poor at the best, and it would be left behind with light steps, amidst the group of friends who henceforth cheered the route.

Messrs. Conybeare and How-

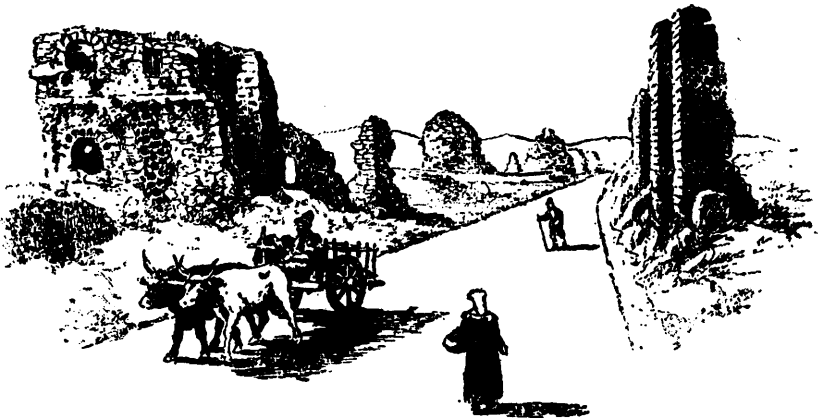
son thus describe the crowded appearance of the Apian Way :

Many a lectica, or palanquin, such as that in which Nero was reclining when overtaken by his



RUIINED TOMBS ON THE APPIAN WAY.

poet or his illustrious friends, reached Appii Forum from the opposite direction, amidst such turbulent scenes and rude surroundings as Horace so vividly paints.



THE APPIAN WAY.

On gaining it, however, a pleasure awaited him which made such troubles as the frogs or mosquitoes, or the bad water, so great a plague to the Roman, indifferent

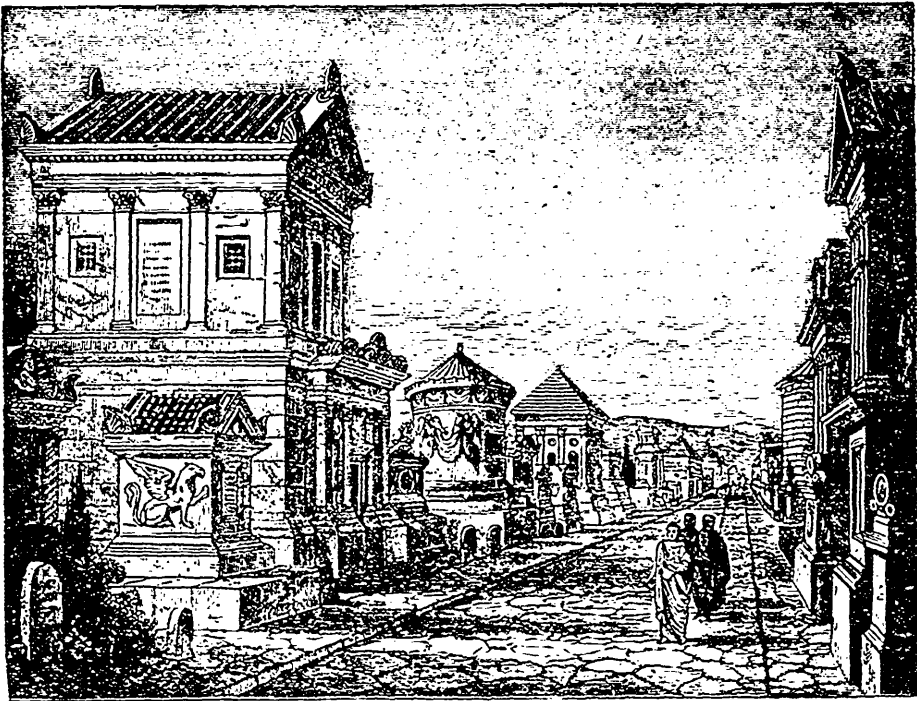
murderers, may have been met by St. Paul in his progress,—with other carriages, with which the road would become more and more crowded,—the cisium, or



light cabriolet, of some gay reveller, on his way to Baiæ,—or the four-wheeled rheda, full of the family of some wealthy senator quitting the town for the country.

At a place called the Three Taverns, from its inns, or post-houses for the change of horses, a second party of Christians was waiting to welcome and to honour “the ambassador in bonds.”

ward objects in “hues borrowed from the heart.” The diminution of fatigue—the more hopeful prospect of the future—the renewed elasticity of religious trust—the sense of a brighter light on all the scenery round him—on the foliage which overshadowed the road—on the wide expanse of the plain to the left—on the high summit of the Alban Mount,—all this, and more



FIFTH MILE OF THE VIA APPIA, RESTORED.

With a lighter heart and a more cheerful countenance, he travelled the remaining seventeen miles, which brought him along the base of the Alban Hills, in the midst of places well known and famous in early Roman legends, to the town of Aricia. The great apostle had the sympathies of human nature; he was dejected and encouraged by the same causes which act on our spirits; he, too, saw all out-

ward objects in St. Luke's sentence,—“When Paul saw the brethren, he thanked God, and took courage.”

In ancient days, remarks Mr. Young, the practical Romans allowed, with rare exceptions, no burials to take place within the walls of Rome. As a result, all the great roads were lined with tombs. No road seemed to have been more popular for this pur-

pose than the Appian Way. To this day, to the student of history, it is one of the most interesting roads in the world. But its glory has long since departed. Goths and Huns and Vandals innumerable, with their fierce hatred towards Rome, and all things Roman, long centuries ago, first sacked and plundered, and, in many instances, tried to utterly destroy these monuments of the dead, which pride, or patriotism, or affection here raised. Majestic

and the Curatii, took place. Here is the tomb of Cecilia Metella, the largest of them all. Not far off is the Arch of Drusus, beneath which Paul walked, still in good preservation. The tomb of Annia Regilla is at the end of a lane, off a little from the Appian Way. It is interesting for its inscription: Annia Regilla, the wife of Herodes, light of the house, whose this estate was. A sweet, suggestive name for the good-wife is this, "light of the house."



THE APPIAN WAY—FROM A PHOTOGRAPH.

even in their ruin, I have been trying to think how they must have appeared to "the prisoner of the Lord," in the perfection of their beauty, even though some of them were three centuries old.

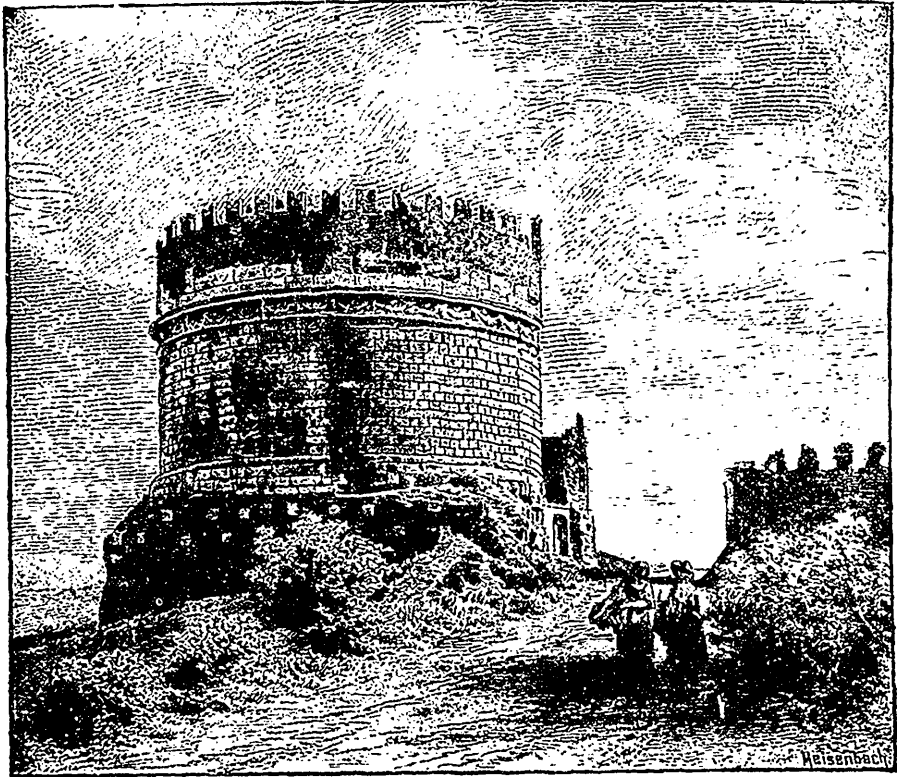
Let me mention a few of these historic monuments that still remain. There are the ruins of the tombs of Severus and Gallienus, and the temple of Hercules. Then follow the ruins of Tor di Selce, where the famous battle between the three champions, the Horatii

Here is the tomb of Seneca, brother of Gallio, before whom St. Paul was brought in Achaia, and of Pomponius, the friend of Nepos and Cicero. Farther on is the tomb of Cornelius Tacitus, and there is the tomb of the mighty Scipios, S. Hispanus, S. Africanus, and S. Asiaticus,—and many others. What historic memories are brought up by the fact that not far off on yonder slope is Campus Rediculi, the nearest spot that the mighty Hannibal reached in his

efforts to destroy the august city, that so long was the rival, and eventually the remorseless conqueror, of his own beloved Carthage.

Traversing this Street of Tombs, there is no doubt that the prospect was, in many respects, very different from the view which is now obtained from the same spot. It

one conspicuous cupola, in the midst of a desolate, though beautiful waste. St. Paul would see a vast city, covering the Campagna, and almost continuously connected by its suburbs with the villas on the hill where he stood, and with the bright towns which clustered on the sides of the mountains opposite.



TOMB OF CECILIA METELLA, ON THE APPIAN WAY.

is true that the natural features of the scene are unaltered. The long wall of blue Sabine mountains, with Soracte in the distance, closed in the campagna, which stretched far across to the sea and round the base of the Alban hills. But ancient Rome was not, like modern Rome, impressive from its solitude, standing alone, with its

We quote from our own Valeria an account of this part of the Appian Way.

This Queen of Roads,\* over which thundered the legions that conquered the world, ran straight as an arrow for three hundred miles. Though nearly four hun-

\* *Regina Viarum* the Romans called it.

dred years old when traversed by St. Paul, it was as firm as the day it was laid, and after the lapse of fifteen hundred years more, during which "the Goth, the Christian, time, war, flood, and fire," have devastated the land, its firm lava pavement of broad basaltic slabs seems as enduring as ever. On every side rolled the undulating Campagna, now a scene of melancholy desolation, then cultivated like a garden, abounding in villas and mansions, whose marble columns gleamed snowy white through the luxuriant foliage of their embosoming myrtle and laurel groves. On either side of the road were the stately tombs of Rome's mighty dead—her praetors, proconsuls, and senators—some, like the mausoleum of Cecilia Metella, wife of the triumvir Crassus, rising like a solid fortress; others were like little wayside altars, but all were surrounded by an elegantly kept greensward, adorned with parterres of flowers. Their ruins now rise like stranded wrecks above the sea of verdure of the tomb-abounding plain. On every side are tombs—tombs above and tombs below—the graves of contending races, the sepulchres of vanished generations.

Across the vast field of view stretched, supported high in air on hundreds of arches, like a Titan procession, the Marcian aqueduct, erected B.C. 146, which after two thousand years brings to the city of Rome an abundant supply of the purest water from the far distant Alban mountains, which present to our gaze to-day the same serrated outline and lovely play of colour that delighted the eyes of Horace and Cicero.

The following description of the Roman Campagna and the aqueducts, by John Ruskin, is said by Frederick Harrison to be a "piece of word painting hardly surpassed by anything in our literature":

"Perhaps there is no more impressive scene on earth than the solitary extent of the Campagna of Rome under evening light. Let the reader imagine himself for the moment withdrawn from the sounds and motion of the living world, and sent forth alone into this wild and wasted plain. The earth yields and crumbles beneath his foot, tread he never so lightly, for its substance is white, hollow, and carious, like the dusty wreck of the bones of men. The long knotted grass waves and tosses feebly in the evening wind, and the shadows of its motion shake feverishly along the banks of ruin that lift themselves to the sunlight. Hillocks of mouldering earth heave around him, as if the dead beneath were struggling in their sleep. Scattered blocks of blackstone, four-square, remnants of mighty edifices, not one left upon another, lie upon them to keep them down. A dull purple poisonous haze stretches level along the desert, veiling its spectral wrecks of massy ruins, on whose rents the red light rests, like dying fire on defiled altars; the blue ridge of the Alban Mount lifts itself against a solemn space of green, clear, quiet sky. Watch-towers of dark clouds stand steadfastly along the promontories of the Apennines. From the plain to the mountains, the shattered aqueducts, pier beyond pier, melt into the darkness, like shadowy and countless troops of funeral mourners, passing from a nation's grave."

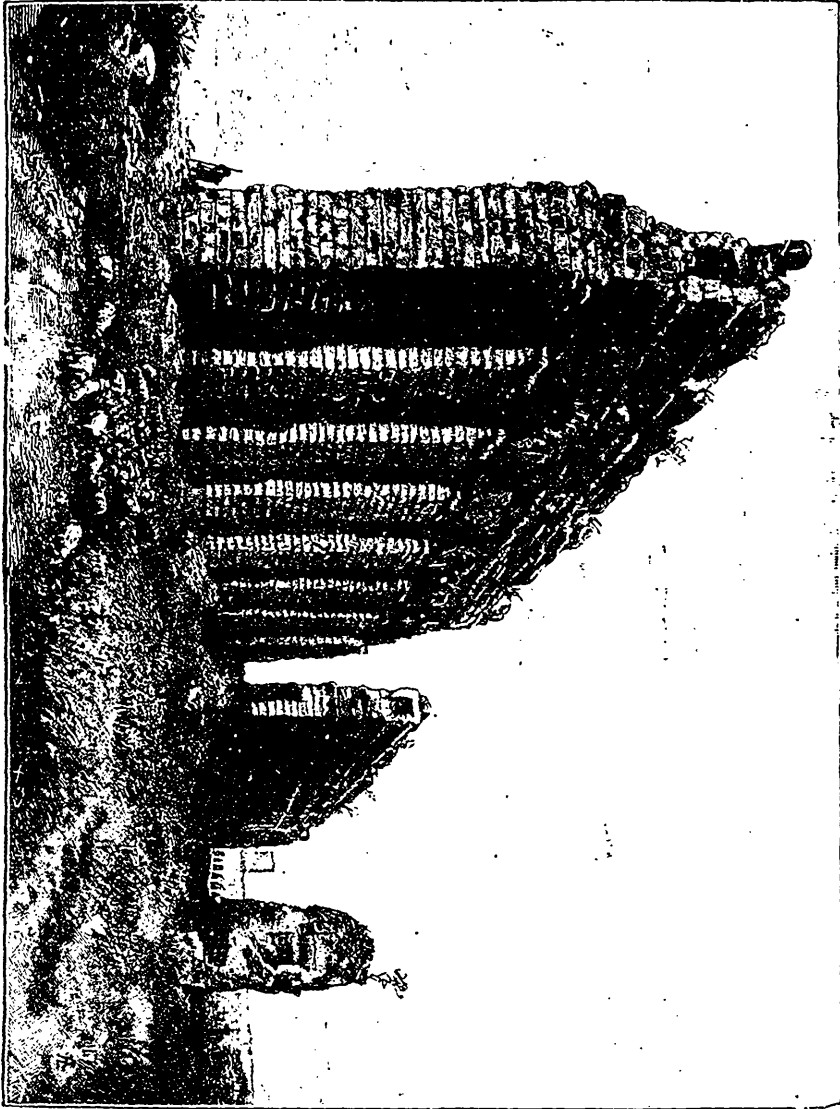
As the travellers drew nearer the gate of the city, it became difficult to thread their way through the throngs of eager travellers—gay lecticae or silken-curtained carriages and flashing chariots, conveying fashionable ladies and the gilded gallants of the city to the elegant villas without the walls—processions of consuls and proconsuls with their guards, and crowds of peasants bringing, in the panniers of their patient donkeys, fruits, vegetables, and even snow from the distant Soracte, protected from the heat by a straw matting—just as they do in Italy to-day. The busy scene is vividly described in the graphic lines of Milton:

"What conflux issuing forth or entering in;  
Prators, proconsuls to their provinces  
Hasting, or on return, in robes of state;

Lictors and rods, the ensigns of their  
power,  
Legions and cohorts, turms of horse and  
wings ;  
Or embassies from regions far remote,  
In various habits on the Appian Road."

" In his cool hall with haggard eyes,  
The Roman noble lay ;  
He drove abroad, in furious guise,  
Along the Appian Way.

" He made a feast, drank fierce and fast,



RUINS OF AN OLD ROMAN AQUEDUCT.

Matthew Arnold also vividly depicts the Roman society of the day:

" On that hard Pagan world disgust,  
And secret loathing fell,  
Deep weariness and sated lust,  
Made human life a hell.

And crown'd his hair with flowers—  
No easier, nor no quicker pass'd,  
The impracticable hours."

The famous tomb of Cecilia Metella is a circular structure sixty-five feet in diameter, built upon a square base

of still larger size. After two thousand years it still defies the gnawing tooth of time.

There is a stern round tower of other days,  
Firm as a fortress with its fence of stone,  
Such as an army's baffled strength delays,  
Standing with half its battlements alone,  
And with two thousand years of ivy grown,  
The garland of eternity, where wave  
The green leaves over all by time o'er-  
thrown;

What was this tower of strength? within  
its cave,  
What treasure lay so locked, so hid?—a  
woman's grave.

I entered and explored several of these  
proud patrician tombs, but found naught  
but crumbling arch and column and shat-  
tered marble effigies of their former ten-  
ants.

Often mere vulgar wealth exhibited  
its ostentation even in death by the mag-  
nitude and magnificence of these tombs  
designed to perpetuate the memory of  
their occupants forever. But, as if to re-

buke that posthumous pride, they are  
now mere crumbling ruins, often devoted  
to ignoble uses, the very names of whose  
tenants are forgotten. Many of them,  
during the stormy period of the Middle  
Ages, were occupied as fortresses.

More recently that of Augustus, on the  
Campus Martius, was used as an arena  
for bull-fights, and as a summer theatre,  
where Harlequin played his pranks upon  
an emperor's grave. Some of the tombs  
have been converted into stables, pig-  
styes, or charcoal cellars. The cinerary  
urn of Agrippina, wife of Germanicus,  
was long used as a measure for corn. In  
many a vignarolo's hovel in the Campagna  
swine may be seen eating out of sculp-  
tured sarcophagi, and in the imperial  
halls, where banqueted the masters of the  
world, they hold their unclean revels.  
"Expende Hannibalem," says the Roman  
satirist, "Quot libras in duce summo  
invenies?" "Weigh the dust of Han-  
nibal. How many pounds will you find in  
that great leader?"

## PENSÉE.

BY DENIS WORTMAN.

may not know the wondrous ways  
The Lord to ancient Prophets spake,  
His poets bade to sing their lays,  
And kings His conquests undertake;

An angel with his flaming sword;  
A night-reared ladder, angel-trod;  
A burning bush, whence spake the Word;  
A still, small whisper, straight from  
God;

A Nathan's speech, Thou art the man;  
A sore sense of a nation's need;  
A new and solemn truth that ran  
Into a people's sacred creed;

A seraph song, the clouds among,  
That scared but thrilled the shepherd-  
heart;  
A light noon's strange effulgence flung  
The persecutor's path athwart;—

All this I may not know, and should  
Such voice or vision mine e'er be,  
Perhaps appalled my spirit would  
From His unwonted presence flee!

Yet dreams we dream, and visions come,  
And voices speak to them that hear;  
And angels visit oft the home  
That hails the hour when God draws near!

Pity, O Lord, the lives that turn,  
Unlistening, from thy sacred speech,  
When simply Thy sweet will to learn  
Were more than worlds of worlds can  
teach!

O mine, among earth's silences,  
To hear Thy low, soft-whispered thought,  
And midst my human darknesses  
Discern the visions Thou hast brought!

Nor fearful I, of some brave deed,  
Some threatening foe, some cross un-  
couth!  
Only be mine Thy cause to speed,  
And love Thine inmost, utmost truth!

O visions, shine! O voices, speak!  
God's worthiest work and will declare!  
O manful men, His semblance seek;  
Trust truth and love; dear duty dare!

—*The Independent.*

## THE RIGHT HON. LORD KELVIN, LL.D., D.C.L.\*

BY DONALD MACLEOD, D.D.



SIR WILLIAM THOMSON (LORD KELVIN.)

During the month of June, 1896, there was celebrated in the University and city of Glasgow the Jubilee of the greatest scientist of our time, whose nobility and attractiveness of character are as remarkable as his intellectual achievements. Not long ago the remark was made to me by a person of ability, "When future generations look back on the career of Lord Kelvin they will assign to him a place second only to Newton;" and the more one reflects on his career, on the greatness of his mind, and on his work as a physicist, the more will this opinion commend itself. There is

\* One of the most distinguished members of the British Association, which will meet in Toronto in August, is Lord Kelvin. We have pleasure, therefore, in presenting a life-sketch of this great man by his life-long friend, the editor of *Good Words* magazine.

scarcely a field of science which he has not explored, and few in which he has not been a discoverer. And he holds his vast store of learning with such unaffected simplicity and beautiful graciousness of spirit, as to suggest to those who know him that type of child-likeness of character as opposed to childishness regarding which it was said, "Of such is the kingdom of heaven." I never see that massive head without recollecting Tennyson's phrase,

" . . . large-browed Verulam,  
The first of those who know."

The list of Lord Kelvin's honours is an indication of his world-wide reputation. He is LL.D. of the Universities of Edinburgh, Cambridge, Dublin, Montreal, and Bologna; D.C.L. of Oxford, M.D. of Heidelberg, F.R.S., P.R.S.E., Foreign Associate of the French Academy of Sciences, a Grand Officer of the French Legion of Honour, Commander of the Belgian Order of Leopold, and Knight of the German Order "Pour le Merite"; re-elected in 1872 a Fellow of St. Peter's College, Cambridge; is now for the third time President of the Royal Society of Edinburgh; from 1890 to 1895 President of the Royal Society, London; and in 1871 was President of the British Association at its meeting in Edinburgh.

If heredity means anything, Lord Kelvin was predestined to be a mathematician, for his father, James Thomson, LL.D., was a born man of science, and a thorough mathematician. I well re-

member him as Professor of Mathematics in the University of Glasgow at the time when the future Lord Kelvin was beginning his career in the Chair of Natural Philosophy. He was the son of a farmer in the north of Ireland, with few outward advantages; but his inborn thirst for knowledge overcame all difficulties. He was to a large extent self-taught, and when he received larger opportunities—coming to Glasgow as a student for a few years—he so profited that when he returned to Ireland he was appointed first Professor of Mathematics in the newly founded college of Belfast; and in a very few years was promoted to the Chair of Mathematics in that same University of Glasgow which he had so recently left.

William Thomson was thus saturated with mathematics almost from his cradle. His father undertook complete charge of his education till he was ten years old, quickening his latent genius into activity, and training him with such skill that the boy, directed along the best methods of work, which had been made exquisitely clear to him, advanced by leaps and bounds into the very arcana of the exactest of all the sciences. His classical and general education was likewise carefully attended to by his father. He was matriculated as a student in Glasgow at the early age of ten years—little more than out of his childhood. He was a mere youth when he went to St. Peter's College, Cambridge, and at the age of twenty-one he passed as Second Wrangler, and was First Smith's Prizeman.

But ere he had won these honours he was already famous, for his contributions at eighteen years of age to the Cambridge and Dublin Mathematical Journal had at-

tracted the attention and excited the wonder of the scientific world in France as well as in England, by their boldness, originality, and accuracy. He was shortly afterwards made editor of that famous journal, and gathered round him a brilliant staff of writers; yet it was his own papers which chiefly aroused the attention of scientists. When twenty-two years of age he was appointed to the Chair of Natural Philosophy in Glasgow, which he has now occupied for fifty years, and which will forever be associated with his name.

The University buildings in which he then lived and for many years taught, was the old and venerable College in the High Street, among the very slums of the city, and in every way in marked contrast to the palace of learning which now dominates the hill to the west of the city, at the foot of which runs the turbid stream, the Kelvin, the name of which Sir William Thomson took for his title as a Peer. Yet those students who, like himself, attended the quaint old college, with its Scoto-French architecture, its small courts and curious turrets, will claim for those bygone days an academic feeling and a comradeship, engendered very much by the sense of antiquity and the closer social surroundings, which they miss in the more widely spread but less picturesque pile erected by Sir Gilbert Scott.

I was a student under William Thomson, as he was then called, during his third or fourth "session," and the subjects which then formed the chief interest of his lectures were statics, electricity, heat, and acoustics. In electricity he was then pushing his way towards those conclusions, the results of careful experiment, but still more of profound mathematical investigation, which have led to such



triumphs in applied science. The dynamical theory of heat which his friend Joule of Manchester was the first to enunciate, became the subject of keenest mathematical elaboration and expansion. It is interesting now to read his own delightful reminiscence of his first meeting with Mr. Joule, and the first astonished impression he received respecting Joule's discovery.

"I can never forget the British Association at Oxford in the year 1847, when in one of the sections I heard a paper read by a very unassuming young man, who betrayed no consciousness in his manner that he had a great idea to unfold. I at first thought it could not be true because it was different from Carnot's theory, and immediately after the reading of the paper I had a few moments' conversation with the author, James Joule, which was the beginning of our forty years' acquaintance and friendship. On the evening of the same day, that very valuable institution of the British Association, its *Conversazione*, gave an opportunity for a good hour's talk and discussion over all that either of us knew of thermo-dynamics. I gained ideas which never had entered my mind before, and I thought I too suggested something worthy of Joule's consideration, when I told him of Carnot's theory. Then and there, in the Radcliffe Library, Oxford, we parted, both of us feeling, I am sure, we had much more to say to one another, and much matter for reflection in what we talked over that evening."

His students had the benefit of the studies consequent on that conversation—at least those members of his class who were able to follow him in his flight through complicated processions of figures and for-

mulas, until he reached the viewless air of the very highest mathematics, where he soared at ease and smiled back upon us all, as if the exercise was quite within the power of the greatest "duffer" on the benches before him. The eagle could not imagine why the house-sparrow did not find equal enjoyment in sweeping upward to the gateways of the day. This was the sort of expression his face usually bore when he had completed some intricate calculation, and turned with an exquisitely sweet smile—not in satire, for of that vice he is incapable—but with an innocent trustfulness in the sympathetic response, even of the most ordinary intelligence. This is characteristic of him still. Left to himself, he may so indulge in the higher mathematics—to him but playthings—as to become hopelessly obscure to ordinary hearers; but let any one express his inability to understand him, and he will at once make his meaning clear and simple as to a child.

It would be out of place in a periodical like this to attempt a list of the investigations, discoveries, inventions, and manifold achievements which have made Lord Kelvin's name the foremost in science, theoretic and applied. Whatever he does is done thoroughly, and must rest on absolute truth. For while he is a wonderful experimentalist, bringing all his vast learning in chemistry and dynamics to the aid of his mechanical skill when engaged in any research, yet it is his mathematical genius which forms his most powerful instrument as a physicist.

His fame as an electrician is so unrivalled that many people imagine that this constitutes his only claim to distinction. For it is to him we are indebted for the suc-

cess of the cable which unites England and America, and which has made possible the success of the submarine wires which now spread like a network on the bed of ocean after ocean. For years the Anglo-American cable appeared impossible. The first attempt ended in loss. But Lord Kelvin brought to bear upon the problem such a knowledge of the laws of energy, as well as electricity, that, as a second Columbus, he reached America, and the message of peace, "Glory to God in the highest, On earth Peace, and Goodwill toward men," was flashed from land to land. The honour of knighthood then bestowed on William Thomson was but a faint expression of the admiration felt for the man and his achievement. His allusion to the first attempt and subsequent loss and success of the cable, and the benefits to science as well as humanity which ensued, were delightfully touched on in his address to the British Association.

"Those who perilled and lost their money in the original Atlantic telegraph were impelled and supported by a sense of the grandeur of their enterprise and of the world-wide benefits which must flow from its success: they were at the same time not unmoved by the beauty of the scientific problems presented to them; but they little thought that it was to be immediately through their work that the scientific world was to be instructed in a long neglected and fundamental electric discovery of Faraday's; or that, again, when the assistance of the British Association was invoked to supply their electricians with methods for absolute measurement, they were laying the foundation for accurate electric measurement in every scientific laboratory in the world, and initiating a train of investigation which now sends up

branches into the loftiest regions and subtlest ether of Natural Philosophy."

Lord Kelvin's patents are of many kinds, and so numerous and valuable that a large workshop in Glasgow, filled with skilled workmen, and under able scientific management, is occupied chiefly with their production. The sea has been to him a life-long passion. For years he was a keen yachtsman, and the *Lalla Rookh*, which he used to navigate to a large extent himself, served as an instrument both for enjoyment and research. While he sailed on her far and near, he was perpetually engaged in investigation. These experiences led him to invent certain instruments which have proved invaluable to seamen. I remember the pleasure with which the weather-beaten captain of a P. & O. steamer learned that I knew Lord Kelvin. "He is the greatest friend of the sailor who ever lived," he told me, "for in giving us his compass and sounding line he has ensured a safety we never had before."

Lord Kelvin is a ceaseless worker. He has little faith in flashes of inspiration. What he said of Mr. Joule may be applied to himself: "It is hard work, early begun and persevered in and conscientiously carried out, that is the foundation of all great works, whether in literature, philosophy, or science, or in doing good to the world in any possible way." And that hard work, begun early in life, is perseveringly, ceaselessly, and conscientiously prosecuted now in his advanced age. Attached to his class-room in the University there is a magnificent physical laboratory, splendidly equipped, in which a large staff of accomplished assistants is continually engaged, under the superintendence of his nephew, Dr. Bottomeley, himself a man of high scientific attain-

ments. It is a most picturesque scene that is presented when, going from the sunlit court, one enters this great magician's cave, with its maze of crucibles, pulleys, pumps, levers, and ranges of tables and shelves covered with instruments and appliances; and, when climbing from floor to floor, there is discovered in every corner mysterious arrangements indicating experiments at different stages.

His enthusiasm when some critical experiment is being conducted is marvellous. He beams with interest, and everything else appears forgotten for the moment. Each assistant has to be on the alert, while he, using when necessary all his own physical energy, gets so absorbed that sometimes rude students, aware of Lord Kelvin's abstraction, will take the opportunity of making some witty commentary of which the lecturer is entirely unconscious. He is in another world, and neither hears nor heeds the doings of the foolish. He has one strange peculiarity. While the higher mathematics and all the mysteries of logarithms and the calculus are as easy to him as the alphabet, he often appears puzzled when a sum is presented to him in ordinary numerals. A question of simple addition placed in this way on the board will sometimes lead to the query being put to the class or to an assistant, with a certain funny look of helplessness: "How much is that?"

His power of abstraction from all surroundings, becoming dead to what is near him, and lost in intellectual processes, is quite extraordinary. He is never without his "tablets"—in the shape of a well-known note-book, of the kind used by reporters, and which he carries in his pocket and produces at the most unexpected times. I have seen him, when on a visit to a country-house, in a crowded

drawing-room, with all the jabber of conversation going on in full flood, sitting with his note-book, and filling page after page with intricate calculations, seeking the solution of some problem which awaited investigation. He can do this in railway carriages, and in a storm at sea, as calmly as in his library. He will get himself propped up in the corner of his cabin and set to work, and become so absorbed as to be unconscious that there has been a gale blowing while he was at work. And yet, if recalled to ordinary life by some passing questioner, his gentle face lights up with interest, when others, more self-conscious than he, would display irritation. Indeed, I never knew a man less self-conscious. He is absolutely without affectation or any thought of self-importance. He will converse with a nobody in a manner so respectful and attentive as to make that nobody imagine himself that he has been delightfully interesting and even informing to Lord Kelvin. This arises from the simplicity and sweetness of a great nature.

There are, however, some things which do rouse that equable spirit into a white heat. In politics, for example, all the intensity of his native Irish blood became kindled during the Home Rule controversy against a measure which he deemed dangerous to the welfare of his country. Another subject never fails to rouse him. Let any one talk as believing in spiritualistic manifestations, and at once the calm man flashes out in indignant and contemptuous anger. He will have none of it!

But no one is more reverent as regards all religious questions. He is neither agnostic nor materialist. His studies have led him into the widest fields of speculative research as to cosmogony and the destiny of the material universe.

He has weighed everything, from atoms and molecules to sun, moon, and stars; he has calculated the rate of loss of energy in the sun's heat; he has entered with zest on speculations as to the origin of life on this planet, and has seen in the dust of meteors suggestions as to the conceivable source of those seeds from which evolution has proceeded; he has dealt with Geologic Time and Plutonic Forces; but none of these fascinating and awful problems have ever shaken his faith in God. Like Newton and Faraday, he can rise with reverent heart into the thought of the spiritual as well as material glory which has been revealed, and has continued a humble Christian worshipper. With deep interest I have listened to him and his friend the Duke of Argyll conversing on these subjects and speaking of the contradictions whereby some scientists deny design while they cannot write a page without employing terms which expressly involve it. A purer and nobler nature than that of Lord Kelvin I have never known.

He was in early days a good athlete as well as a distinguished student, but an accident which befell him many years ago, when enjoying the "roaring game" of curling, lamed him for life. The intrepid manner in which, despite this weakness, he throws himself into all manner of work, and the unsparing energy with which he attends to every detail of duty, rushing to London and back to his class as if such rapid journeys were a pastime, reveals the burning enthusiasm of his nature. His contributions to strictly popular literature are unhappily few, for he is so painstaking that writing articles of that nature is exceedingly irksome to him. "The Nature Series" has, however, several volumes by him of "Popular

Papers and Addresses"—the unwary must, however, not understand "Popular" too literally in this connection. In conjunction with Professor Tait, of Edinburgh, he has published what is the best text-book on Natural Philosophy extant.\*

With the exception of the first eight years, Lord Kelvin has spent his whole life in Glasgow College, and his love for his Alma Mater is proportionately great. He has a charming house at the extreme end of the Professors' Court, with windows looking over the college grounds. The house is an epitome of applied science as regards lighting and ventilation, and at every turn one meets indications of wires and telephones connecting the house with the laboratory and elsewhere. A large astronomical clock stands in the hall. He has a large and delightful house at Largs, in Ayrshire, looking out on the Firth of Clyde and the greater and lesser Cumbræes.

He has been twice married; his first wife was Miss Crum, of Thornliebank, a most charming and bright companion, whose early death was a terrible blow to his affectionate heart. The present Lady Kelvin, formerly Miss Blandy, seems to have been made for him, strong both in head and heart, of wide sympathies and most engaging kindness. Nothing can be more delightful than their happy married life, as she, while herself forming a centre of attraction, enters into all his interests, and by her wise and loving care secures for him a restfulness that makes for health as well as study. It was when engaged on his great work laying the Atlantic cable that they met in Madeira, where her family occupies the chief place. No one who has visited the two "Quintas" belonging to

\* "Treatise on Natural Philosophy." By Thomson and Tait.

her brother will ever forget the beauty of the surroundings. At the summer "Quinta," far up on the mountains, the sea is visible on either side, east and west, of the Brazen Head, and the glory of the vegetation is marvellous. It is not easy to imagine a place which can show at the proper season not fewer than 10,000 camellias in bloom, scattered over the

grounds; and where specimens of rare trees and flowers are everywhere in evidence!

Well may the University do honour to her greatest son, who for fifty years has been a teacher within her walls, while teaching the whole world the last results of science. Well may she think of him as "et presidium et dulce decus meum."

## CURIOSITIES OF THE TELEPHONE AND MICROPHONE.

BY MARIAN NORMA BROCK.

The idea of reproducing sounds at a distance from this source existed long before Prof. Graham Bell gave to the world his telephone. As early as 1831, Wheatstone, by his "magic lyre," showed that when the sounding boards of two musical instruments are connected by a pine rod, a tune played on one will be reproduced on the other.

In 1854, M. Charles Bourseul wrote a paper on the electric transmission of speech, and even went so far as to propose a model of a telephone which, though impracticable, might have led to success had Bourseul further pursued his experiment. Others shared the dream of Bourseul, and, in 1864, Philip Reis, a German electrician, made an attempt at constructing an electric telephone which was in some degree successful. But it is an example of "The little more, and how much it means! And the little less, and what worlds away!" Just ten years later, in 1874, Prof. Graham Bell brought out his telephone. He was the first to succeed in making dead matters eloquent and to him has all the triumph of discovery been given.

Prof. Bell's aim was the production, by means of the undulations of pressure, caused by sound, on a membrane, of an electric current, the strength of which should vary directly as the pressure varied, copying the human ear with its vibrating drum. The plate which he first used as a vibrator was a small piece of clock-spring, glued to the centre of a parchment diaphragm. The magnet was mounted with its end carrying the coil opposite, and very close to, the centre of the clock-spring. On saying to the spring on the telephone at his end of the line, "Do you understand what I say?" the answer came back to Prof. Bell from his assistant at the other end, "Yes, I understand you perfectly." Though the sounds were feeble, the experiment clearly proved the feasibility of his idea. Prof. Bell now set to work with enthusiasm to try to discover the most perfect form and arrangement of the parts for his telephone.

Bell's telephone was first exhibited at the Centennial Exhibition, in Philadelphia, in 1876, and was greeted with delight and astonishment. In September of the same year it was on exhibition

in Europe, at the Glasgow meeting of the British Association, where it created a great sensation. All England was soon filled with excitement over the wonderful discovery, when Prof. Bell, the following year, himself exhibited his invention in London. Sir William Thomson (Lord Kelvin) pronounced it "the greatest of all the marvels of the electric telegraph."

After Bell's success, scores of experimenters entered the field, and the variety of modifications described have been well-nigh endless. Few, however, possess real merit and fewer still have any new principle involved in their construction.

Prof. Bell found that an increase in the size of the iron disc attached to the membrane augmented both the loudness and distinctness of the sounds. This fact led, at length, to the adoption of the thin iron disc now in use, which acts as both membrane and armature. It was also ascertained that a small central mouthpiece, with a thin air space extending across the face of the membrane, answered best. The telephone in its present form consists of a small compound permanent magnet fitted into the centre of a tube of "hard rubber," carrying at one end a short electro-magnet, the coil of which is included in the circuit when the instrument is in use. In front of its electro-magnet is a thin, soft iron disc, whose cover forms the mouth-piece.

This iron disc of the telephone has a fundamental note of its own to which it responds more readily than to any other. For the low, deep voices of men, the plate of a telephone should be larger than for the shriller voices of women and children.

At the Paris International Electric Exhibition of 1881, Professor D. E. Hughes, the discoverer of

the microphone, with other distinguished scientists, was examining a telephonic apparatus devised by Dr. Werner Siemens; but they could not make it answer to their voices. Various names of foreign savants were shouted into the mouthpiece of the telephone, but it would not respond. At length, Professor Hughes, who is an accomplished musician, stepped forward and secretly ascertained the fundamental note of the telephone by tapping its plate. He then turned to his fellow-jurors with a smile and remarked that there was a peculiarity about this telephone; it was an Anglophile, and would only respond to the honoured name of Faraday. The jurors naturally treated his words with amiable derision; but this was soon changed to wonder when, after calling the names of Siemens, Ohm, Volta, Ampere, Franklin, the telephone remained obstinately silent, until he pronounced the magic syllables "Faraday," to which it joyously responded. The word "Faraday" had simply been spoken by him in the same tone as the fundamental note of the telephone plate.\*

The singular fidelity of the latest telephones in reproducing the exact tones of the voice was well illustrated a short time ago. Mr. Whyte, teller in the National Bank, Anstruther, was recently accompanied by his dog, which he inadvertently left there when he returned to his home at Pittenweene, in the evening. On arriving at his home, Mr. Whyte at once telephoned to the bank to know if the dog was there. Being told that it was, the "receiver" was placed in the dog's ear, and Mr. Whyte whistled and called its name. The dog recognized his master's voice at once and in a

\* "The Romance of Electricity." By J. Munro. London: Religious Tract Society. Toronto: William Briggs.

most excited and delighted manner started off for home.

The sensitiveness of the telephone is as remarkable as its fidelity to the sound-waves. From the days of Galvani, the nerve tissue of an animal was considered the most exquisitely sensitive galvanoscope for detecting electric currents, until M. D'Arsonval recently proved that even an ill-made telephone is at least one hundred times more sensitive to the feeblest variations of the electric current.

Although little difficulty has been met with in successfully operating over great distances by land, the telephone under sea is—well, "that's another story," as Kipling would say. A cable has the effect of running together the delicate and rapidly succeeding vocal currents of the telephone, muffling the sounds, or causing absolute silence. A thousand miles of well-insulated land wire makes little difference in the distinctness of a telephone message; one hundred miles of submarine wire would probably be quite dumb.

Mr. Munro, in his experiments with an artificial telephone cable, found that while the voice could be heard over a length equivalent to fifty or sixty miles, when it came to eighty miles all sound was lost. The inductive retardation had frittered away and obliterated the delicate undulations of the vocal current. However, telephone messages are carried from Holyhead to Dublin, from London to Paris, and a satisfactory telephone line crosses the Straits between Singapore and Ishore—but we shall probably have to possess our souls in patience for some time to come if it is our ambition to speak across the great Atlantic, "under the roaring forties."

On the Continent the telephone

wires are generally laid underground, where they are in less danger of external injury, but are more liable to inductive retardation than the aerial wires.

Great inventions, though fraught with rich benefits for man, have nearly all been accompanied by more or less danger to his life and limb. The electric telephone might almost be called the exception which proves the rule. The only accidents anywhere recorded—and these are very rare—have been caused by the use of the telephone during violent thunderstorms. A physician at Hartford, Conn., several years ago, was using his telephone during a storm, when the instrument suddenly blazed up in his hands, and though he was in no wise injured himself, the person to whom he was speaking was stricken deaf for some hours. The telephone in Strassburg Cathedral was destroyed by a flash of lightning, but the person using it at the time suffered no harm. Lightning protectors are now commonly employed and all danger of such accidents is thereby avoided. Where protectors are not employed in this country, it is usual to shut the instrument off from the circuit during severe thunderstorms.

But, on the other hand, to enumerate all the various ways in which the telephone has proved a boon to humanity, would more than fill the space allotted to my pen; with just a glance at its most conspicuous services we hurry on. Before the X rays were ever heard of, the telephone performed what is now part of the work of those wonderful rays. Professor Hughes invented an Induction Balance, the coils of which, united to the telephone, rendered it most sensitive to the presence of metals, making it possible to detect a good coin from a base one, or a new coin from an old one, by the

sounds given out by the instrument. It was a similar contrivance which Professor Graham Bell used in locating the bullet in the body of the beloved and honoured President Garfield.

Mr. Elisha Gray, inventor of the Harmonic Telegraph, was a trifle sceptical of the power of the Balance and determined to put it to the test. He had a small particle of iron in one of his fingers, which had remained there for thirty years, but which he could still feel like a small pinhead. Speaking to Professor Hughes, he asked him if he could tell him by the use of his Balance which finger was the injured one. Mr. Gray's fingers were one after another put into the Balance. When the "game" one was inserted, the telephone proclaimed the fact in unmistakable tones.

The telephone has been found of great service in large collieries for communicating between the galleries below the pit-mouth. In times of accident it may prove the only means of communication between the miners and the world of light above. Neither is the submarine diver's equipment complete without a telephone fixed to his helmet, within reach of his mouth, so that he can speak freely without using his hands. Balloons also communicate with each other and with the earth by means of the telephone. Thus this wonderful instrument has been carried to the heavens above and into the earth beneath and to the waters under the earth. The telephone has been used in the Western States in marrying persons at a distance, and once, at least, in examining the defendant of a law suit, too ill to appear in court.

But no small thanks are due to the microphone for the very practical and widely extended use of the telephone. Professor Hughes, while engaged in experiments up-

on a Bell telephone, in an electric circuit, discovered that a peculiar noise occurred whenever two hard electrodes, such as two wires, were drawn across each other, or were made to touch each other with varying firmness. He constructed an instrument, consisting essentially of two hard carbon electrodes placed in contact, with a current passing through the point of contact and a telephone included in the same circuit. One of the electrodes was attached to a sounding-board, capable of being vibrated by sound-waves, and the other was held in contact with it either by springs or weights. When the sounding-board was spoken to, or subjected to sound-waves, the resistance of the loose electrode, due to its weight, or the spring, or both, caused the pressure at the contact to vary, thus giving the current a form corresponding to the sound-waves, and it was therefore capable of being used as a speaking-telephone transmitter, and was called by Hughes a microphone.

Some microphones are very loud-speaking, and therefore serviceable for long distances or disturbed circuits. Microphone transmitters have frequently been applied to the pulpit of a church so that the sermon may be heard through the telephone by invalid members of the congregation. In Paris, one may listen, from any of the different club-rooms or cafes, to the music which is being rendered at the opera or concert, by means of the telephonic communication secured with the stage. Everyone has probably noticed how, when listening in the telephone, sounds or music in no way directly connected with the wire are frequently overheard, caused by what is technically called induction. Thus a clerk in Chicago, while listening at the telephone one morning, was startled to hear



a woodland chorus of birds and frogs—strange sounds in the heart of Chicago! The secret was that a loose joint in the telephone wire, where it passed through a wood, acted as a microphone and carried the music of the woods to his astonished ears. Just so a conversation over the wire is frequently interrupted by the noises of the street, induced by the wire.

Not only as a transmitter of sounds is the microphone useful but also as a relay of sounds received in a telephone. Professors Houston and Thompson were probably the first to use the microphone in this way. They placed a carbon microphone on the vibrating plate of a telephone in such a manner that the vibrations of the plate, due to the received speech, would react on the microphone and be transmitted by it over another line to another receiving telephone at a distance. The speech was reinforced in this way just as a telegraph message is reinforced when it is weak and sent on its way afresh.

As its name would suggest, the microphone can intensify feeble sounds, thus resembling the microscope which magnifies minute objects. It may seem strange that with this power of augmenting sounds, the microphone has so far been of no service to deaf persons. The reason is that while the microphone can convey to the quick aural nerve sounds which would otherwise be inaudible, the sounds themselves are not very loud and therefore fail to reach the dull ear. M. Bert, a celebrated French physicist, did attempt the construction of a microphone for the deaf; its success was doubtful.

Innumerable uses have been found for the microphone on account of its marvellous power of conveying the faintest sounds to the ear. Professor Rossi, for instance, used it for detecting the

earth-tremors preceding earthquakes and volcanic eruptions. In Austria it has been of service in detecting the trickling of underground waters. Its use has been suggested for hearing the signal taps of entombed miners, and the noise of approaching torpedo boats. In 1892, a Russian experimenter applied the microphone to a supposed corpse, when he discovered a faint pulsation of the heart, and thus saved the person from being buried alive.

Astonishing as the power of the instrument is, however, we cannot listen to all that report says of it. The Danbury Times tells us that "with a microphone a farmer can hear a potato-bug coming down the road a quarter of a mile away, and can go out with an axe and head it off."

Looking forward to the invention of such an instrument as the microphone, Antoinette Brown Blackwell, in 1876—a year previous to Professor Hughes' discovery—wrote: "It remains to invent some instrument which can so retard the too rapid vibrations of molecules as to bring them within the time adapted to human ears, then we might comfortably hear plant movements carrying on the many processes of growth, and possibly we might catch the crystal music of atoms vibrating in unison with the sunbeam." Though the microphone is constructed upon an entirely different principle from that above suggested, it is interesting to note that Professor Chandler Roberts, by attaching a microphone to a thin porous septum and allowing hydrogen gas to diffuse through the latter, heard a rushing sound as of a wind, which became still when the diffusion ceased. This sound was evidently caused by the jar of the atoms on the pores of the septum. Professor Graham Bell has further found that a metal micro-

phone joint is sensitive to the sound of a beam of intermittent light falling upon it. Surely, when "the little hills rejoice on every side," and "the valleys are covered over with corn," so that "they shout for joy, they also sing;" the music may not always be only for the poet's ear.

The microphone has, in addition to all its other uses, lent its aid to medicine, where it has been found of service to physicians in enabling them to read the pulse and auscultate the heart and lungs more exactly.

The thought of the future of the telephone and microphone suggests wonderful possibilities, but remembering the wise old adage, "It's never safe to prophesy unless you know," we draw in the reins on our imagination and only speak of what is so close at hand that we may almost say we have it.

Though the telephone is not likely ever to supersede the telegraph, on account of the much greater speed with which the latter carries its messages, it nevertheless possesses the happy advantages of conversation, with question and answer, all in the speaker's own voice, and for this reason its wider use between distant towns will certainly appreciably decrease the use of the telegraph. Improvements in the management of telephone wires, and a better knowledge of how to overcome its foes will, doubtless, make it possible to greatly increase the distance over which the telephone can be successfully used. One can at present carry on a conversation with the greatest ease and distinctness between Toronto and Ottawa, and the telephone line between Chicago and New York, a distance of about one thousand miles, works admirably. There is no reason why a telephone line extending across the continent should not work perfectly; and

though the sea as yet forms a barrier to its forming a circle round the world, vast improvements may be expected in the future management of submarine wires. We may hope to see Europe, Asia, Africa and America engaged in happy converse over the telephone, the wires being successfully operated across the different Straits—the circuit made by land as far as possible. At some distant date the islands of the sea may be included in the friendly circle.

The use of the telephone has been suggested for future Arctic expeditions. The wire could be laid along the ice—a good insulator—and the exploring party would thus be kept in connection with the ship from which they set out. Should they need assistance, the line would serve as an excellent guide to the party sent out to their relief. The perfect success of this experiment would depend, of course, on the good behaviour of the Polar bear in leaving the wire alone. It is already used largely in military manoeuvres.

Where we expect to see the telephone enlarge its field most widely is in business, in society, and in the home. Telephones are already in every town. We may expect to see them in every house and in every room. Farmers will be able to communicate with the towns, or with each other; indeed, in this wide circuit, it will be possible for everyone to talk with whomsoever he pleases. The mistress will give her orders to her cook, or her butcher, without leaving her room, and a man can talk with his coachman from his library; distant friends will chat together without taking a journey, and "John O'Groat's may talk not only with Land's End, but with Paris or Brussels." The whole world will be vibrating with the sound of human speech.

"May wisdom grow from more to more" with all speed, that the millions of words ever ringing over the wires may all be worth saying. What a golden age for gossip is before us!

The politician and the public lecturer of the future may have their road made smooth for them, if they will, by the telephone. Soon, instead of starting out on a weary lecture tour, these fortunate men may sit in their arm-chairs at home, make their speeches or orations into a "loud-speaking" telephone, connect their telephone with public platforms all over the country, and so be heard from a hundred places at once. The reverent audiences will sit in solemn silence as the words come ringing forth from the telephone behind a screen on the platform. That the additional weight of the man's own presence may not be lost, the cinematograph can exhibit the man himself, on the screen, giving all his impulsive gestures. Care, of course, must needs be exercised in order that the cinematograph and telephone work in exact time with each other, that word and action may always agree. The many advantages of such a system are obvious.

For one thing, men may go into partnership in the lecturing business. The man whose success as a lecturer would be conspicuous were it not for his poor delivery, can have his words given to the telephone by an elocutionist, while he himself can pose for the cinematograph, striking the proper attitudes. In this way eloquence, which would otherwise be lost on all but a favoured few occupying the front seats, may reach the ears of thousands at once. The politician will appreciate the advantage of being able to address his whole constituency at the same time. On the night before the elections

he is giving a fresh, vigorous address all over the land. We are amazed at his calm, clear, logical sentences, and the utter absence of any wild excitement in his statements, till we remember that this speech was made to the phonograph some days before from the calm, serene depths of his easy chair. We can hardly believe our ears, we recognize his voice so distinctly, and can scarcely realize that the perfect representation of the man we see before us is only the work of the cinematograph!\*

The great orator of insignificant appearance may send forth his mighty wisdom simply clothed in a voice, which will travel the world over, exerting an influence everywhere, while the man himself is known to the world in general only as a Great Voice.

We are still living on the very borderland to this strange study of electricity, with only a glimmering of the truth to light us and vast fields of darkness before us. If, when the great secret is out, the study should lose much of its fascination as a mystery, there will be compensation in the wider knowledge acquired and the possibilities of putting it to still stranger uses, as we learn to curb the mighty forces and bring them completely under our control. "Wheresoever power has to be sent to a distance," says Mr. Munro, "or distributed in numerous channels, wheresoever a wire can be run,

\* We have heard a phonograph giving, through a funnel-shaped mouth-piece, a descriptive account of a cyclorama—the weird, ghostly voice, as of some bodiless speaker, sounding very uncanny in the dim half-light. The same instrument has reproduced the voices of the distant and the dead as if they were present. The Rev. Dr. Carman and the present writer, during a visit to Newfoundland, were requested to give each an address into a phonograph receiver, that it might be rehearsed in the out-posts and distant stations that we were unable to visit.—Ed.

there electricity will be useful. Its velocity adapts it for the transmission of intelligence beyond the speed of thought; and its versatility renders it capable of producing motive power, heat, light, and chemical change. Can we doubt that there is a marvellous future before this wonderful agent, which unites the qualities of the ancient Hermes, Hercules, and Proteus? Can we question that it will be used in every walk of life, in a thousand unimaginable ways? The day is coming when the world will be endowed, not only with sensory, but with motor

nerves, and when this higher stage of material organization has been reached, we may expect the political and social state of human life to be exalted with it." We think we see the dawn of a golden era, full of happy days for

"Those that, eye to eye, shall look  
On knowledge; under whose command  
Is earth and earth's, and in their hand  
Is Nature like an open book.

"No longer half akin to brute,  
For all we thought and loved and did,  
And hoped and suffered, is but seed  
Of what in them is flower and fruit."

Kingston.

---

ABIDE WITH US, O LORD!

In fiery chariots of the west ascending,  
The day hath passed in triumph, Lord, to Thee!  
Its fallen mantle glows with twilight blending  
On the far shadowy spaces of the sea.  
It is towards evening. Oft at noontide roaming  
Our hearts have met with Thee in sweet accord;  
Now in the peace and leisure of the gloaming  
Abide with us, O Lord!

The ocean like a dreamless child is sleeping,  
Hushed in the hollow of Thy mighty hand;  
One star a-tremble in the west is keeping,  
Lone watch on all night's silent border-land.  
Enter, dear Lord, our loaf is yet unbroken,  
Our water shall be wine by Thee out-poured;  
We yearn to hear Thy "peace be with you" spoken.  
Abide with us, O Lord!

Low murmurs through the seaward boughs are wafted,  
A breath of roses steals along the shore.  
More calm, more sweet, Thy loving words engrafted,  
In our responsive hearts forevermore.  
Yet more we crave. O tarry in our leisure!  
And to the longing of our souls afford  
Thy love and joy in overflowing measure.  
Abide with us, O Lord!

It is towards evening. Soon from out the shadows  
A deeper shadow on our brows must fall.  
So soon across the dim familiar meadows  
The hour will come when we must leave them all.  
Ah! leave us not with Death alone to wander,  
Let Thine own hand unloose the silver cord.  
Though night fall here, until the day dawn yonder,  
Abide with us, O Lord!

## PETER MACKENZIE.\*

BY THE REV. W. H. ADAMS.

There never was but one Peter Mackenzie. And while this world wags there will never be another. Dame Nature set all her wits to work to fashion him and then she broke the model. He was the best-natured brother of the great Methodist household in Britain—the prime favourite in the happiest and heartiest confraternity this or any other age has ever looked upon. Truly “the elements were so mixed in him that nature might stand up and say to all the world, ‘This was a man!’”

Peter Mackenzie! For many a year that was a name to conjure with. It was the “Open, Sesame,” from Dan to Beersheba in the Methodist Israel. To know him constituted you a friend and brother anywhere. And his presence in the pulpit or on the platform meant a full church and a repleted treasury, for no man ever was more popular than he. At the bare mention of his name your neighbour’s corrugated brow relaxed and gladness whisked his gloom away.

The Reverend Peter Mackenzie, Wesleyan minister. Such was his style and title. But you never called him “reverend.” He was too great for that. The college and the Church adorn men’s names to little use sometimes. For when the world’s eyes light on the man it loves, it tears the tinsel off, sets him above all “hooded, mitred, or tiaraed clay,” and calls him plain John Brown. And so our hero was known as Peter or

Paater Mackenzie, according to provincial preference, from one end of the kingdom to the other. High sounding terms could not increase his worth, and he little recked the loss of them—

“Pigmies are pigmies still though placed  
on Alps,  
And pyramids are pyramids in vales.”

Peter Mackenzie has been styled the comet of Methodism. Verily he was no fixed star. He was but seldom at his own fireside. Sooth to say, the Connexion kept him continually on the go, so that he travelled thousands of miles each year, and raised during his ministry something like \$600,000 for distressed or burdened circuits. He ever left the savour of his benign influence behind, and through his instrumentality multitudes were turned from sin to God. After his superannuation he was suffered no respite—he retired from the itinerancy to itinerate the more. Well might he exclaim in his own quaint way, “There will be no rest for Peter Mackenzie till he is dressed in a wooden suit and tucked in with a shovel!”

Peter Mackenzie was born of cotter parents in a Highland glen in 1824. He was taken to Perthshire at an early age. Here, after a brief schooling, he was hired when only twelve years old as a herd laddie, his wages being two dollars and a half for the twelve-month, together with board and lodging. It was at this time the first good impressions were made upon his mind. His employer, one David Lonley, was a godly man, and his prayers with his family had a salutary and lasting effect on young Peter.

\* The writer wishes to express his indebtedness to the Rev. Joseph Dawson’s “Life of Peter Mackenzie,” published in London last year. It is a veritable Mackenziana, and would well repay perusal by the reader.

Until he was twenty Peter Mackenzie lived in his native Scotland, where by dint of his natural Scotch thrift he managed to save a few pounds out of his scanty earnings as a farm labourer. He also established a settled reputation for himself by reason of his hairbreadth 'scapes and escapades. Legend has it that the Laird of Logie once declared, "That boy will either be a good man or a great scoundrel!"

In 1844, Peter Mackenzie for the first time looked, to quote Dr. Johnson, "on that noblest prospect a Scotchman ever sees—the highroad that leads him into England." Arriving in Durham, he entered the coal mines. Here he laboured for ten or a dozen years, becoming a great favourite among the colliers, and dancing and fiddling as merrily as any of them. He never forgot the vernacular of the pit. "I can't get my pick round that," he would say in after years, when confronted with a theological difficulty.

It was during these years, viz., in 1847, that Peter married. "Eh, but ye're a braw lassie!" were the first words he ever uttered to his future wife. After a courtship of a year and a half, and when the bride was just turned twenty, they set up housekeeping in a miner's cottage of two rooms. "Look at it!" said he, years afterwards. "There it is—and that's the place to which the popular lecturer brought his bride!" And then he moralized on the folly of despising the day of small things.

Those who knew Peter Mackenzie during these years represent him as a good-tempered, witty, jolly fellow. He was a "clinking dancer," but he was never a swearer, a drinker, or a fighter, and he cherished a scorn and hatred for all meanness and deceit. He was quite a reader, too, but was never known to enter

a place of worship. It was with great wonder, therefore, that he was observed to be present on a Sunday evening, in 1849, at a special service that was being conducted in the Methodist chapel by Squire Reed, and that subsequently, while Toplady's touching hymn, "Rock of Ages," was being sung, he was seen to make his way to the "penitent form," where he sought in earnest supplication the forgiveness of his sins. The change in his life from that hour was complete. Old things passed away and all things became new. His exuberant good humour never left him, but godless frivolity was supplanted by religious earnestness.

For some time Peter Mackenzie was employed in Sunday-school work, and then he was unexpectedly called on to conduct a service in a country school-room. This was the obscure commencement of his wonderful career. Tradition says he wore a short jacket, seemed out of place, and looked every inch a pitman, but his intense earnestness, humour and wit captivated his audience, and made a lasting impression. He soon became a popular local preacher, often robbing himself of necessary sleep that he might make his time at the pit and keep all his preaching appointments. In 1855 he was engaged by the local church as a lay missionary, and for three years he was eminently successful in this vocation, turning many to righteousness.

At length, in 1858, the Rev. R. Brown, a scholarly and saintly man, had what many deemed the temerity to propose him for the ministry. This action was endorsed by William Arthur, the distinguished author and divine. With such strong supporters, the issue was that, though he utterly failed in the literary examinations

which candidates were required to pass, and though he had a wife and two children, he was placed on the list of accepted candidates and sent to Didsbury College. He had obtained the highest marks for his sermons. And though the pulpit needs not less culture but more, what does it avail that a minister is a mathematician or an astronomer if he cannot preach?

Peter Mackenzie distinguished himself at college. But not in the way the metallist does. He developed no passion for Hebrew roots or Greek particles. He was predestined never to become a finical critic or exegete. He would turn the lecture-room into a prayer-meeting if he had his way. Being sent, as most students were, to a neighbouring town to conduct Sunday services, he shocked the people by his awkwardness, but he completely won their hearts.

"His appearance," said Mr. Burgess, "was so uncouth, so unparsonlike, so opposed to the trim and natty appearance usually associated with the name 'student,' that I remember thinking, if not saying aloud, 'Bless me! is that the student? What will they send next?'"

"We went to the chapel expecting anything but the food which was provided for us. His appearance in the pulpit excited attention, then surprise, some little amusement, wonder as to what was coming next. We were not accustomed to such vigorous and vivacious conduct. From head to foot he was all alive with a life so different from our own. The way he gave out the hymns made us prick our ears and expect something out of the common. His reading of the lesson was accompanied by suggestive action. His text was John iii. 16.

"I must not attempt to describe the sermon. The subject was one

in which he revelled. We were all fairly carried away with the stream of eloquence, of warning, and of appeal to which we had listened; our mental attitude was revolutionized; we had expected so little, we had received so much, and that of such excellent quality, that we marvelled, and felt constrained to ask, How knoweth this man these things?

"The effect of this service was electric. It was felt that a new power had come amongst us, and that we must utilize it promptly and to the utmost. A series of special services was at once arranged for, to be conducted by Mr. Mackenzie. The power of the Holy Spirit was manifested, many were pricked to the heart, many were added to the church."

And so Providence ordered that while he was nominally a student, Peter Mackenzie should become really an evangelist during the period he was assigned to college. He went from place to place at the behest, or with the permission, of the Governor, and everywhere signs and wonders followed his proclamation of the Gospel.

It was not until 1864 that Peter Mackenzie delivered his first lecture. This was soon after his ordination and when he was stationed at Wiltshire. By the time he removed to Newcastle, in 1871, his fame both as a preacher and lecturer was established and he was in great demand. From that time till his death he was the peripatetic prophet of his people, loved and welcomed in every corner of the kingdom. His lectures were for the most part on Scripture subjects. They were prepared with great care, packed with great truths, and delivered in a manner inimitable. He was no buffoon or mountebank, but he lived over all the scenes he described. You heard Samson's lion roar, saw the Samaritan lift the bruised burden

on his beast, watched Simon Peter cast his line for the money-loving fish, or beheld the hospitable whale open its mouth, and, addressing the absconding prophet, cry, "Come in, Jonah, out of the wet."

On the principle that it is easier to turn one Oriental into a European than to make a multitude of ordinary Occidentals look out of Eastern eyes, he turned each of his hearers into Englishmen. Prophets and apostles were Methodist ministers who had much to do and a short life to do it in. His biographer says: "When he made these old-time heroes sit with us at the same table, share with us the same toil, talk with us in the same speech, it was not to rob them in any degree of their rightful dignity, but to make us realize more intensely that we are of one common kith and kin. . . . To bring home to his hearers the community of soul between themselves and those who lived in the far past was one of Mr. Mackenzie's main objects, and one in which he strikingly succeeded."

Peter Mackenzie's lectures not only cost him much in their preparation, but were also a heavy tax on him in their delivery. "Look at that handkerchief," said a gentleman to his neighbour, when Peter stepped upon the platform on one occasion at Burton-on-Trent, "before he is through it will be as wet as a dishcloth." And so it proved. Everybody knew that handkerchief. At the commencement of the proceedings it was as white as the driven snow—and always slightly perfumed—that was Peter's weakness; during the lecture it came into such constant requisition, now perchance lying on his arm as a baby, and anon finding its way to his heated brow, that in the end it presented a woeful appearance indeed. "You see I am not a dry preacher," he

would remark, and hasten home to change his linen.

He was powerful in the pulpit. His prayers, so full of love and sympathy, caught men on their wings and carried them to God. He was no ranter, neither did he resort to sensationalism nor slang. Once he broke a bookboard, but that was in his early days, and he resolved by Divine grace to do better. His sermons were formed of good material, and he worked hard over their preparation, on the rail or in the study. He had the soul of the poet and the outlook of the pure-minded man of God. His firm, joyful faith was just the antidote for an age that "blots out life with question marks." "What a poor shelter the world gives," he cried on one occasion. "A horse covering behind a bare pole in an open field on a cold wintry day is a true picture of it. But the shelter of Jesus is manifold and sufficient—succour in temptation, sympathy in trial, and abundant consolation in sorrow." Crisp, sententious utterances fell often from his lips and lived in the memory of those who heard them. "Simon Peter learned more from a cock-crow in three minutes," he once exclaimed, "than a classical tutor could have taught him in a fortnight."

But he is gone. "It has killed me," he said, alluding to the fact that they had driven him in an open carriage between Winchcombe and Cheltenham on a cold, damp morning. He fought hard with the disease, but it held him in a merciless grasp. Shortly before the end he clasped his hands, and like the venerable apostle he was, pronounced the grand and ancient formula: "The grace of the Lord Jesus Christ, and the love of God, and the fellowship of the Holy Ghost be with you all." He died on the 21st of November, 1895, having just entered on his seventy-



second year. The Church he had served so long and so unselfishly sincerely mourned him, and the poor, to whom he had ever been so kind, manifested the most touching signs of sorrow and respect.

The other day a handsome stained glass window, placed in one of the Newcastle churches at the expense of a city alderman in memory of the late Rev. Peter Mackenzie, was unveiled. The window is divided by a partition, one of the scenes representing St. Peter in prison, and the other our

Lord calling upon St. Peter to take up the work of the ministry. It will be a fitting memorial to remind coming generations of one of nature's great-souled noblemen,—one who laboured hard in His Master's cause, and yielded his life up in His service, and who was as true and legitimate a successor of the Prince of the Apostles as though he had been consecrated by all the bishops who ever breathed, or heralded by all the crossiers that were ever carried.

Orono.

---

## SIR HENRY PARKES.

BY A. PATCHETT MARTIN.

Born a Warwickshire peasant, at the village of Stoneleigh, in the year of Waterloo, Parkes began the struggle of life with the scanty education (if education it can be called) of the place and period. Whatever this schooling may have been, it ended in his eleventh year. Breaking away from "Hodge-dom," he, as a mere youth, migrated to the midland capital, and became in time a turner in ivory in the city of Birmingham. Here doubtless his real "education" began, at the lathe, among his mates in the workshop, and above all in the crowded popular assemblages of that time of stirring political agitation, when Reform and the "six points" made Chartism loom a mighty and dreaded thing even in the eyes of the conqueror of Napoleon.

Parkes, I believe, despite all assertions to the contrary, was never a Chartist. But he was an ardent supporter of Lord Grey's great Reform measure, and his sympathies in all matters were with the "dumb millions" to whom by birth he belonged. He was always reticent as to his early life,

and it is not possible to speak too positively on the subject. He married a young woman of his own class in Birmingham, and finding no scope for his talents, or prospect for his family, in England, in his twenty-fourth year emigrated to Sydney, where he arrived with his wife and child, without a friend to greet him or even a letter of introduction in his pocket. He has himself drawn a restrained but pathetic sketch of his early trials and struggles as an obscure and unknown colonist. He tells us how he wearily tramped Sydney, but could find no work, until in sheer desperation he was forced to engage himself as a farm labourer "up country" at £30 a year, thus reverting to the lowly station he had so painfully emerged from in England. After some six months of this, he returned to Sydney and obtained employment at an ironmonger's, then in a foundry, and afterwards for a while as a petty officer in the customs.

But Parkes was not the man to remain long in a dependent post; a letter appeared in one of the

newspapers exposing some alleged malpractices in the Customs, and this letter being traced to the cadaverous young tide-waiter, he was promptly suspended. Resigning his small appointment, Parkes opened a toy-shop in Hunter Street, Sydney, and worked at his craft as a turner. He seems, indeed, to have been a skilful turner in ivory, to judge by an excellent set of chessmen which he presented to his old friend, Sir Saul Samuel, who still treasures them among his valued possessions.

Parkes was now once more in a big city, and at the centre of things; also he was again in the very midst of fierce political agitations. The colony, just emerging from its primitive penal condition, and partially released from imperial bureaucratic rule, was the very place to arouse the latent political energy of the young Birmingham democrat.

At this time, too, the late Lord Sherbrooke, then Mr. Robert Lowe, was making a great stir throughout New South Wales and Port Phillip by his crusade against the squatters. There could never have been much in common between Robert Lowe and Henry Parkes; but at this crisis the aspiring toy-seller of Hunter Street knew not how to restrain his admiration for the semi-blind English lawyer who was fighting almost single-handed the governor of the colony, the old imperial officials, and the squatter party.

These two remarkable men met once on the public platform to denounce the landing of the convicts then on board the Hashemy, lying in view in Sydney harbour. By this time, Henry Parkes had learnt the use of that terrible political weapon, the tongue; and, speaking as a workingman, he delivered one of the harangues of the hour

in a strong and bitter denunciation of Lord Grey's ill-considered policy of reviving criminal transportation.

From this time forth, the petty business of the toy-shop and the turning lathe in Hunter Street was doubtless more and more neglected for the coming labours and more dazzling rewards of the great talking shop in Macquaire Street. Parkes in a few years himself became member for Sydney, sat for various constituencies for something like forty years, and was actually no less than five times Prime Minister of New South Wales.

Sir Henry Parkes' career from Warwickshire peasant and mechanic to Australian statesman, and friend of Tennyson, Carlyle, and Gladstone, was in itself remarkable. Average humanity will continue to wonder at, and even admire, such a splendid specimen of human force and vitality.

The curious reader at the British Museum, if he turns to the two bound copies of *The Atlas*, which Lady Sherbrooke has recently presented to that institution, will find in odd corners of this old Sydney newspaper little sets of sentimental verses signed "H. Parkes." These are among the first outpourings of Sir Henry's strange and wayward muse; for the most part there is little to distinguish them from the ordinary contributions to the "Poets' Corner" of any provincial newspaper. But Sir Henry Parkes, whose egotism was colossal, placed a very high value on everything which emanated from himself, and, as his remark about the "third-rate poet" shows, he had a special weakness for his own rhymings. From time to time he collected these verses and issued them in thin volumes as "*Stolen Moments*," or "*Murmurs of the Stream*." We read of great men amusing their leisure hours with

carpenter's tools, and we never imagine that the results of their handiwork displayed much skill. Mr. Parkes has amused himself with iambs and anapaests instead of saws and chisels.

Little wonder, when it was industriously circulated in the colonial papers that Lord Tennyson had presented Sir Henry Parkes with his poems in exchange for a volume of very prosaic poems, that some Sydney wag should have exclaimed: "How characteristic of Parkes always to get the best of the deal!"

Through Thomas Woolner, the sculptor, whom he had first met in Sydney many years before, Sir Henry Parkes became acquainted with Tennyson, and also, I think, with Browning. There is no doubt that both these illustrious poets conceived a real liking for Parkes, which to my mind says not a little in his favour. On an earlier visit to England, with the late Mr. Dalley, he had brought from Sir Charles Gavan Duffy a letter of introduction to Thomas Carlyle; and the grim old philosopher, as well as his keen-witted and sharp-tongued wife, evidently grew to appreciate their strange Australian admirer. The truth is that, to literary persons, Parkes, when out of office, and on one of his wandering tours, was a very agreeable companion. He had a perfect mania for collecting rare books and curious relics of men of letters; and though his poems, as I have said, display so little humour, his store of anecdote was by no means scanty and often very amusing. It frequently struck me in listening to the endless stories he used to relate with infinite gusto, of the impecuniosity of Ben Jonson and the financial straits of literary men, from Fielding to Coleridge, that one reason for his admiration of them was that so many of these men of

genius were, like himself, often driven to odd financial shifts. Although, as a successful colonial politician, he accepted titles and other distinctions, he was always opposed to the acceptance of such baubles by our great authors. Over the Tennyson peerage he shook his head gravely. "Tennyson," he said to me, "was far too great a man to condescend to be a lord; he should have gone down to the grave, and to all posterity, as plain Alfred Tennyson."

Two clever, though somewhat contradictory, critics of colonial men and manners seem to have been alike impressed by the surpassing ugliness of Parkes. Sir Charles Dilke, in his "Problems of Greater Britain," observes, "When Sir H. Parkes wrote in 'The Strong Man,'—

Like a rock that breasts the sea  
Firm he stood, in front of foes;  
To his friends a sheltering tree  
That in changeless beauty grows,

he may have been thinking of himself; but in person he has been as little favoured by nature with good looks as Socrates or Darwin."

When Froude returned from his visit to Australia, he was fond of describing the appearance of Sir Henry Parkes waiting to receive him at Randwick Station, Sydney; and he would say, with a sly twinkle, "But he is so ugly." Finding that I did not altogether re-echo him, Froude asked, "Don't you consider Parkes hideous?" I could only reply by saying that I should as soon think of describing some shaggy old lion as "hideous."

Of course, these are matters of individual taste. I confess to be among those who regard the portrait of Darwin in the National Portrait Gallery as that of an essentially noble type of intellectual man, infinitely more pleasant to gaze upon than many a young Bond Street exquisite. With re-

gard to Sir Henry Parkes' personal appearance, I well remember the effect it produced upon me when I saw him enter a crowded fashionable drawing-room in Grosvenor Square.

"Standing well over six feet in height, with his large leonine head and huge shaggy locks now whitened by half a century of public life, Sir Henry Parkes presents a striking and commanding figure. Far from the fashion-plate type either in face or form, this Australian when seen in the most aristocratic of London drawing-rooms commands the glances of admiration; for his appearance is neither commonplace nor conventional, and in his manner there is no vestige of vanity."

It is surely a strange fact, that in a community where success means the making and accumulation of money, the foremost of its public men should have been all his life in debt. Parkes used to declare, in his airy, off-hand way in dealing with such matters, that all his financial troubles arose from his heroic but unsuccessful attempt to establish a great Liberal daily paper, *The Empire*, in Sydney; a terrific task on which he was engaged for some seven years—from 1850 to 1857. But it would be much nearer the mark to say that this very attempt on the part of a man who knew nothing of practical journalism or printing, and who was without capital or wealthy supporters, pointed to an inherent absence of all commercial foresight, or even of any sense of the value of money.

An old ministerial colleague of Sir Henry's once told me a story of his former chief, which struck me as eminently characteristic. When Parkes was a workingman in Sydney, he was going home one Saturday night with the poor sum of ten shillings in his pocket for his wife's household expenses.

But he chanced to see in a second-hand bookseller's window a book of William Cobbett's ticketed ten shillings, and at once entered the shop, bought the book, and returned home penniless. Not only did he commit this wild extravagance, but in after years he boasted of it! This was his way all through life. It is true that he had few of the vulgar vices and extravagances which make such a hole in many a man's pocket; he did not drink; he never smoked or gambled; nay, he never even belonged to a club. He despised all social display, and avoided the expensive hospitalities which leading members of all communities feel compelled to incur. But if he saw a picture, a rare book, or a literary relic, he at once bought it whether he could afford to do so or not. His friend Woolner trembled when he found that Parkes had given him a number of public commissions for statuary for New South Wales, without a vote in Parliament, or even the consent of the Cabinet. Sir Henry, at the same time, generously ordered and sat for a marble bust of himself, without having any means of paying for it.

Such a man must always be in financial difficulties. Parkes, too, apart from his salary (when in office), had, in the language of the police courts, "no visible means of support." Almost his last act was the sale by auction of his books, pictures, and autograph letters, "for the benefit of his wife and family."

His first wife was a humble Englishwoman, who never attempted to qualify herself for the position to which she was raised by her husband's talents. At her death, Mr. Henniker Heaton writes in *The Times*, Sir Henry Parkes married a nobody, to whom he was very devoted until her last hour. At the very close

of life, he married his young servant-girl. Such "alliances" are, it will be confessed, not those of a man at all mindful of his social status. They, like his debts, did not, perhaps, affect him politically; the mass of the people voted for him on public or personal grounds, and cared little about such matters. But it should be remembered that the more democratic an Anglo-Saxon community is politically, the more exclusive it often becomes socially. Sir Henry Parkes, after his second marriage, would have felt easier in London than in Sydney, Melbourne, or New York.

Although he affected to despise the narrow little coteries which declined to receive Lady Parkes, Sir Henry, who was a very vain man, bitterly resented it as a personal slight.

The end of Sir Henry Parkes' life was peculiarly pathetic. He had lost his unrivalled hold over the populace, and was regarded by many as a "played-out" politician with somewhat mischievous and unworthy personal aims; while his pecuniary position became, with advancing years, more and more unbearable. Charles Lamb, writing so gaily of his "great race" of borrowers, omits to depict that sad fifth act of the play when such men have lost the force and the vitality of youth and the power to confront their creditors and the world at large with the old hopeful buoyancy. Still, Sir Henry, if less able to cope with angry tradesmen and other duns, and no longer the unconquered gladiator of the political arena, was full of courage to the last. With the barest pittance, surrounded by a young family quite unprovided for, he yet, like his friend, Robert Browning, proved himself "ever a fighter" to the last. Responding to the toast of his health when, on his eightieth birthday he said :

"In the cause of constitutional government, I venture to say that men will acknowledge that I have laboured faithfully. With all my shortcomings, and all my errors of judgment, I have, I believe, devoted myself honestly, and with all the ability that God has bestowed upon me, to trying to establish the principles of constitutional government in this country, and to raise the character of the free people over whom it has been erected. But I care to say little to-night. The poet Byron has said, 'What is writ is writ.' May I not say in my case, 'What is done is done'? I cannot by any vanity of mine make it more, and my evil-wishers cannot make it less. Whatever has been done is on record, and I may say that I am penetrated with the conviction that it is sufficient to compel recognition when I am slumbering in the grave. Two truths are present in my mind every day of my life—that the path before me is short, and that it leads to certain and unbroken rest. I would not live my life over again, or a single hour of it, if I had the chance."

In these resolute words, resolutely spoken, the "old man eloquent" summed up his claims and took his last farewell. "Requiescat in pace."

No mere personal sketch can do justice to Sir Henry Parkes. He was, first and foremost, a public man—in some respects a truly great one.

That a man with such drawbacks and deficiencies—lowly birth, poverty, lack of early education, lifelong improvidence, to which may be added untoward, if not unhappy, domestic relationships—should have played such a part for fifty years in public affairs can only be accounted for by the combination of great intellectual capacity with an inborn gift and genius for statesmanship.

## THE CRUCIFIXION OF PHILLIP STRONG.

BY CHARLES M. SHELDON.

## CHAPTER X.

As the man looked up at Phillip in a dazed condition, Phillip said slowly :

"You're not hurt badly, I hope. Why did you attack me?"

The man seemed too bewildered to answer. Phillip leaned over and put one arm about him to help him to rise. He struggled to his feet, but almost instantly sat down on the curb at the side of the road, holding his head between his hands. For a moment Phillip hesitated. Then he sat down beside the man, and after finding out that he was not seriously hurt, succeeded in drawing him into a conversation which grew more and more remarkable as it went on. As he recalled it afterward, Phillip was unable to account exactly for the way in which the confidence between him and his assailant had been brought about.

"Then you say," went on Phillip after they had been talking in brief question and answer for a few minutes, "you say that you meant to rob me, taking me for another man?"

"Yes, I thought you was the mill-man,—what is his name?—Winter."

"Why did you want to rob him?" Phillip asked, not knowing just what to say.

The man replied, harshly, almost savagely, "Because he has money and I was hungry."

"How long have you been hungry?"

"I have not had anything to eat for almost three days."

"There is food to be had at the Poor Commissioners. Did you know that fact?"

The man did not answer, and Phillip asked him again. The reply came in a tone of bitter emphasis that made the minister start :

"Yes, I knew it! I would starve before I would go to the Poor Commissioners for food."

"Or steal?" asked Phillip, gently.

"Yes, or steal. Wouldn't you?"

Phillip stared out into the darkness of the court and answered honestly : "I don't know."

There was a short pause. Then Phillip asked :

"Can't you get work?"

It was a hopeless question to put to a man in a town of over two thousand idle men. The answer was what Phillip knew it would be :

"Work! Can I pick up a bushel of gold in the street out there? Can a man get work where there ain't any?"

"What have you been doing?"

"I was fireman in the Lake Mills. Good job. Lost it when they closed down last winter."

"What have you been doing since?"

"Anything I could get."

"Are you a married man?"

The question affected the other strangely. He trembled all over, put his head between his knees, and out of his heart's anguish flowed the words, "I had a wife. She's dead,—of consumption. I had a little girl. She's dead too. Thank God!"

Phillip did not say anything for some time. Finally he said :

"What will you do with money if I give you some?"

"I don't want your money," replied the man.

"I thought you did a little while ago," said Phillip, simply.

"It was the mill-owner's money I wanted. You're the preacher, aren't you, up at Calvary Church?"

"Yes. How did you know?"

"I've seen you. Heard you preach once. I never thought I should come to this,—holding up a preacher down here!" And the man laughed a hard, short laugh.

"Then you're not—" Phillip hardly knew how to say it. He wanted to say that the man was not connected in any way with the saloon element; "you're driven to this desperate course on your own account? The reason I ask is that I have been threatened by the whiskey men and at first I supposed you were one of them."

"No, sir," was the answer, almost in disgust. "I may be pretty bad, sir, yet not so low as that."

"Then your only motive was hunger?"

"That was all. Enough, ain't it?"

"We can't discuss the matter here," said Phillip. He hesitated, rose, and stood there looking at the man who sat now with his head resting in his arms, which were folded across his knees. Two or three persons came out of a street near by and walked past. Phillip knew them and said good-evening. They thought he was helping some drunken man, a thing Phillip had often done, and they went along without stopping. Again the street was deserted.

"What will you do now?" asked Phillip. "Where will you go?"

"God knows. I am an out-cast on His earth!"

"Have you no home?"

"Home! Yes; the gutter, the street, the bottom of the river."

"My brother!" Phillip laid his hand on the man's shoulder, "come home with me, have some-

thing to eat, and stay with me awhile."

The man looked up and stared at Phillip through the semi-darkness.

"What, go home with you! That would be a good one after trying to hold you up! I'll tell you what you ought to do. Take me to the police station and have me arrested for attempt at highway robbery. Then I'll get lodgings and victuals for nothing."

Phillip smiled slightly. "That would not help matters any. And if you know me at all you know I would never do any such thing. Come home with me. No one except you and myself need ever know what has happened to-night. I have food at my home, and you are hungry. We both belong to the same Father-God. Why should I not help you if I want to?"

It was all said so calmly, so lovingly, so honestly, that the man softened under it. A tear rolled over his cheek. He brushed his hand over his eyes. It was a long time since any one had called him "brother."

"Come!" Phillip reached out his hand and helped him to rise. The man staggered, and might have fallen if Phillip had not supported him. "I am faint and dizzy," he said.

"Courage now! My home is not far off; we shall soon be there," said Phillip, cheerfully. His companion was silent. As they came up to the door Phillip said, "I haven't asked your name, but it might save a little awkwardness if I knew it."

"William—" Phillip did not hear the last name, it was spoken in such a low voice.

"Never mind; we'll call you William if it's all the same to you." And Phillip went into the house with the man, and at once made him feel at home by means of that

simple and yet powerful spirit of brotherhood which was ready to level all false distinctions, and which possibly saw in prophetic vision the coming event in his own career when all distinctions of title and name would be as worthless as dust in the scales of eternity.

Mrs. Strong at once set food upon the table, and then she and Phillip with true delicacy busied themselves in another room so as not to watch the man while he ate. When he had satisfied his hunger Phillip showed him the little room where the Brother Man had stayed one night.

"You may make it your own as long as you will," Phillip said. "You may look upon it as simply a part of what has been given us to be used for the Father's children."

The man seemed dazed by the result of his encounter with the preacher. He murmured something about thanks. He was evidently very much worn, and the excitement of the evening had given place to an appearance of dejection that alarmed Phillip. After a few words he went out and left the man, who said that he felt very drowsy.

"I believe he is going to have a fever or something," Phillip said to his wife as he joined her in the other room. He related his meeting with the man, making very light of his attack and indeed excusing it on the ground of his desperate condition.

"What shall we do with him, Phillip?"

"We must keep him here until he finds work. I believe this is one of the cases that call for personal care. We cannot send him away; the man's entire future depends on our treatment of him. But I don't like his looks; I fear he is going to be a sick man."

Phillip's fear was realized. The next morning he found his lodger

in the clutch of a fever. Before night he was delirious. And Phillip, with the burden of his work weighing heavier on him every moment, took up this additional load and prayed his Lord to give him strength to carry it and save another soul.

It was at the time of this event in Phillip's life that another occurred which had its special bearing upon the crisis of all his life.

The church was dear to his thought, loved by him with a love that only very few of the members understood. In spite of his apparent failure to rouse the church to a conception of her duty as he saw it, Phillip was confident that the Spirit of God would accomplish the miracle which he could not do. Then there were those in Calvary Church who sympathized heartily with him and were ready to follow his leadership. He was not without fellowship, and it gave him courage. Add to that the knowledge that he had gained a place in the affection of the working-people, and that was another reason why Phillip kept up good heart and did not let his personal sensitiveness enter too largely into his work. It was of course impossible for him to hide from himself the fact that very many members of the church had been offended by much that he had said and done. But he was the last man in the world to go about his parish trying to find out the quantity of opposition that existed. His Sunday congregation crowded the church. He was popular with the masses. Whenever he lectured among the workmen the hall was filled to overflowing. He could not acknowledge even to himself that the church could long withstand the needs of the age and the place. He had an intense faith in it as an institution. He firmly believed all it needed was to have the white



light of truth poured continually on the Christ as he would act to-day, and the church would respond, and at last in a mighty tide of love and self-sacrifice throw itself into the work the church was made to do.

Short extracts from his talk will show the drift of his entire belief on this subject :

“Every dollar that a man earns should be spent to the glory of God.

“The teaching of Christianity about wealth is the same as about anything else ; it all belongs to God, and should be used by the man as God would use it in the man's place.

“It is a great mistake which many people make, church-members among the rest, that the money they get is their own to do with as they please. Men have no right to use anything as they please unless God pleases so too.

“The foolish and unnecessary expenditure of society on its trivial pleasures at a time when men and women are out of work and children are crying for food is a cruel and un-Christian waste of opportunity.

“If Christ were here to-day I believe He would tell the rich men of Milton that every cent they have belongs to Almighty God, and they are only trustees of His property.

“This is the only true use of wealth : that the man who has it recognize its power and privilege to make others happy, not provide himself luxury.

“The first duty of every man who has money is to ask himself, What would Christ have me do with it ? The second duty is to go and do it, after hearing the answer.

“If a man's pocket-book is not converted with his soul the man will not get into heaven on it.

“All wealth, from the Christian

standpoint, is in the nature of trust funds, to be so used by the administrator as God, the owner, shall direct. No man owns the money for himself. The gold is God's, the silver is God's ! That is the plain and repeated teaching of the Bible.

“It is not wrong for a man to make money. It is wrong for him to use it selfishly or foolishly.

“If men loved men as eagerly as they love money the millennium would be just around the corner.

“If any man hath the world's goods, and seeth his brother have need, and shutteth up his compassion from him, how dwelleth the love of God in him ?”

At the close of the meeting the minister was surrounded by a crowd of men, and an after-meeting was held, at which steps were taken to form a committee composed of prominent church people and labour leaders to work if possible together toward a common end.

At this time the ministers of different churches in Milton held a meeting to determine on a course of action that would relieve some of the prevalent distress. Various plans were submitted. Some proposed districting the town to ascertain the number of needy families. Others proposed a union of benevolent offerings to be given to the poor. Another group suggested something else. To Phillip's mind not one of the plans submitted went to the root of the matter. He was not in favour with the other ministers. Most of them thought he was sensational. A good many were jealous of his popularity. However, Phillip made a plea for his own plan, which was radical and as he believed went to the real heart of the subject. He proposed that every church in town, regardless of its denomination, give itself in its pastor and members to

the practical solution of the social troubles by personal contact with the suffering and sickness in the district; that the county and the State be petitioned to take speedy action toward providing necessary labour for the unemployed; and that the churches cut down all unnecessary expenses of paid choirs, abolish pew rents, urge wealthy members to consecrate their riches to the solving of the problem, and in every way, by personal sacrifice and common union, work and pray and sacrifice as a unit, to make themselves felt as a real power on the side of the people in their present great need. But Phillip's plan was not adopted. It was discussed with some warmth, but declared to be visionary, impracticable, unnecessary, not for the church to undertake, beyond its function, etc. Phillip was disappointed, but he kept his temper.

"Well, brethren," he said, "what can we do to help the solution of these questions? Is the Church to have no share in the greatest problem of human life that agitates the world to-day? Is it not true that the people in this town regard the Church as an insignificant organization unable to help at this crisis in the affairs of the people, and the preachers as a lot of weak, impractical men, with no knowledge of the real state of affairs? Are we not divided over our denominational differences when we ought to be united in one common work for the saving of the whole man? I have not any faith in the plan proposed to give our benevolence or to district the town and visit the poor. All those things are well enough in their place. But we must do something larger than that. We must do as Christ would if He were here. What would he do? Would He give anything less than His whole life to it? Would He not give Himself?"

Phillip went home smiling almost bitterly at the little bulwark which Milton churches proposed to rear against the tide of poverty and crime and drunkenness and political chicanery and wealthy selfishness. To his mind it was a house of paper cards in the path of a tornado.

Saturday night Phillip went out calling a little while, but he came home early. It was the first Sunday of the month on the morrow, and he had not fully prepared his sermon. As he came in, his wife met him with a look of news on her face.

"Guess who is here?" she said in a whisper.

"The Brother Man," replied Phillip quickly.

"Yes, but you never can guess what has happened. He is in there with William. And the Brother Man,—Phillip, it seems like a chapter out of a novel,—the Brother Man has discovered that William is his only son, who cursed his father and disowned him when he gave away his property. They are in there together. I could not keep the Brother Man out."

Phillip and Sarah stepped to the door of the little room, which was open, and looked in.

The Brother Man was kneeling at the side of the bed praying, and his son was listening, with one hand tight-clasped in his father's, while the large tears were rolling over his pale face.

---

## CHAPTER XI.

When the Brother Man had finished his prayer he rose, and stooping over his son he kissed him. Then he turned about and faced Phillip and Sarah, who almost felt guilty of intrusion in looking at such a scene. But the

Brother Man wore a radiant look. To Phillip's surprise he was not excited. The same ineffable peace breathed from his entire person. To that peace was now added a fathomless joy.

"Yes," he said very simply, "I have found my son which was lost. God is good to me. He is good to all His children. He is the All-Father. He is Love."

"Did you know your son was here?" Phillip asked.

"No, I found him here. You have saved his life. That was doing as He would."

"It was very little we could do," said Phillip, with a sigh. He had seen so much trouble and suffering that day that his soul was sick within him. Yet he welcomed this event in his house. It seemed a little like the brightness of heaven on earth.

The sick man was too feeble to talk much. The tears and the hand-clasp with his father told the story of his reconciliation, of the bursting out of the old love, which had not been extinguished, only smothered for a time. Phillip thought best for the patient that he should not become excited with the meeting, and in a little while drew the Brother Man out into the other room.

By this time it was nearly ten o'clock. The old man stood hesitating in a curious fashion when Phillip asked him to be seated. And as before, he asked if he could find a place to stay over night.

"You haven't room to take me in," he said, when Phillip urged his welcome upon him.

"Oh, yes, we have. We'll fix a place for you somewhere. Sit right down, Brother Man."

The old man at once accepted Phillip's invitation and sat down. Not a trace of anxiety or hesitation remained. The peacefulness of his demeanour was restful to the weary Phillip.

"How long has your son," Phillip was going to say, "been away from home?" Then he thought it might offend the old man, or that possibly he might not wish to talk about it. But he quietly replied :

"I have not seen him for five years. He was my youngest son. We quarrelled. All that is past. He did not know that to give up all that one has is the will of God. Now he knows. When he is well we will go away together." The Brother Man spread out his palms in his favourite gesture, with plentiful content in his face and voice.

Phillip was on the point of getting his strange guest to tell something of his history, but his great weariness and the knowledge of the strength needed for his Sunday work checked the questions that rose for answer. Mrs. Strong also came in and insisted that Phillip should get the rest he so much needed. She arranged a sleeping-place on a lounge for the Brother Man, who, after once more looking in upon his son and assuring himself that he was resting, lay down with a look of great content upon his beautiful face.

In the morning Phillip almost expected to find that his visitor had mysteriously disappeared, as on the other occasions. And he would not have been so very much surprised if the Brother Man had vanished, taking with him his son. But it was that son who now kept the Brother Man at Phillip's house; and in the simplest fashion he stayed on, nursing the sick man, who recovered very slowly. A month passed by after the Brother Man had first found the lost at Phillip's house, and he was still a guest there. That month, while the Brother Man was peacefully watching by the side of the patient, and relieving Mrs. Strong and a neighbour who had helped before he came, Phillip fought

some tremendous battles with himself, with his thought of the church, and with the world around. It is necessary to understand something of this in order to comprehend the meaning of his last Sunday in Milton,—a Sunday that marked an era in the place, from which the people almost reckoned time itself.

As spring had blossomed into summer every one had predicted better times. But the predictions did not bring them. The suffering and sickness and helplessness of the tenement district grew every day more desperate. The mills were going on part time. Thousands of men yet lingered in the place hoping to get work. Even if the mills had been running as usual that would not have diminished by one particle the sin and vice and drunkenness that saturated the place. And as Phillip studied the matter with brain and soul he came to a conclusion regarding the duty of the Church. He did not pretend to go beyond that, but as the weeks went by and autumn came on and another winter stared the people coldly in the face, Phillip knew that he must speak out what burned in him.

One evening in the middle of the month he was invited to a social gathering at the house of Mr. Winter. The mill-owner had of late been experiencing a revolution of thought. His attitude toward Phillip had grown more and more friendly. Phillip welcomed the rich man's change of feeling toward him with an honest joy at the thought that the time might come when he would see his privilege and power, and use both to the glory of Christ's kingdom. He had more than once helped Phillip lately with sums of money for the relief of destitute cases, and a feeling of mutual confidence was growing up between the men.

Phillip went to the gathering

with the feeling that a change of surroundings and thought would do him good. Mrs. Strong, who for some reason was detained at home, urged Phillip to go, thinking the social evening spent in bright and luxurious surroundings would be a rest to him from his incessant labours in the depressing atmosphere of poverty and disease.

It was a gathering of personal friends of Mr. Winter, including some of the church people. The moment that Phillip stepped into the spacious hall and caught a glimpse of the furnishings of the rooms beyond, the contrast between all the comfort and brightness of this house and the last place he had visited in the tenement district smote him with a sense of pain. He drove it back and blamed himself with an inward reproach that he was growing narrow and could think of only one idea.

Phillip could not remember just what brought up the subject, but some one during the evening, which was passed in conversation and music, mentioned the rumour going about of increased disturbance in the lower part of the town, and carelessly wanted to know if the paper did not exaggerate the facts. Some one turned to Phillip and asked him about it as the one best informed. He was roused out of this to answer the question concerning the real condition of affairs in the lower part of the town. Instantly his mind sprang back to that which absorbed it in reality more than anything else. Before he knew it he had not only answered the particular question, but had gone on to describe the picture of desperate life in the tenement district. The buzz of conversation in the other rooms gradually ceased. The group about the minister grew, as others became aware that some-

thing unusual was going on in that particular room. Phillip unconsciously grew eloquent and his handsome face lighted up with the fires that raged deep in him at the thought of diseased and depraved humanity. He did not know just how long he talked. He knew there was a great hush when he had ended. Then before any one could change the stream of thought some young woman in the music-room who had not known what was going on began to sing to a new instrumental variation "Home, Sweet Home." Coming as it did after Phillip's vivid description of the tenements, it seemed like a sob of despair or a mocking hypocrisy. Phillip drew back into one of the smaller rooms and began to look over some art prints on a table. As he stood there, again blaming himself for his impetuous breach of society etiquette in almost preaching upon such an occasion, Mr. Winter came in and said :

"It does not seem possible that

such a state of affairs exists as you describe, Mr. Strong. Are you sure you do not exaggerate?"

"Exaggerate! Mr. Winter, you have pardoned my little sermon here to night, I know. It was forced on me. But—" Phillip choked, and then with an energy that was all the stronger for being repressed, he said, turning full toward the mill-owner, "Mr. Winter, will you go with me and look at things for yourself? In the name of Christ will you see how humanity is sinning and suffering not more than a mile from this home of yours?"

Mr. Winter hesitated and then said, "Yes, I'll go. When?"

"Say to-morrow night. Come down to my house early and we will start from there."

Mr. Winter agreed, and when Phillip went home he glowed with hope. If once he could get people to know for themselves it seemed to him the fulfilment of his desire for needed co-operation would follow.

---

## R H O D A R O B E R T S .

### A W E L S H M I N I N G S T O R Y .

BY HARRY LINDSAY.

*Author of "Adam Cartright's Will," etc.*

#### CHAPTER X.—Continued.

By the morning the news of Edward's arrest had gone quickly round the parish. At first the townfolk could not credit it. He was not one of the rioters, the only likely men to be arrested. But when the nature of the charge against Edward had got known, quite a sullen and indignant feeling settled upon the people.

"It's a lie!" exclaimed Rake Swinton fiercely when he heard it; "the young squire was fighting 'gainst us chaps all tî' tîne, an'

he couldn't possibly have done it. It's a monstrous lie! I'll go witness for him myself."

"Besides," said one of Rake's pals, "young squire wouldn't hurt a fly, much less kill his father."

"It's a got-up tale," said another, "an' I shouldn't be a bit surprised if that man Grainger isn't at the bottom of it."

"If he is," said Rake—and he swore an awful and solemn oath which even startled his hard-natured companions—"if he is, he shall pay for it."

It was on her way to school that

morning that Rhoda Roberts first heard the startling news, and it was again Dick Fowler that brought it to her. He had heard it very early in the morning, while on his way to the pit, and, after learning all the particulars of it as far as they were publicly known, he had turned back home again, as indeed did many others of the colliers, too sick at heart to think of working when such trouble was afoot. And, in her turn also, Rhoda, too, turned back from school after sending a message on to her assistants to endeavour to carry on the work of the school without her.

Poor Rhoda was dumbfounded at the intelligence, and for a while scarcely herself.

"Surely, surely, Dick," she said presently, "it can never, never be true?"

"The news of his arrest is true," he said briefly.

"But the charge!" she exclaimed.

"I cannot believe it," he said.

"The general opinion is that some other explanation will be found for the murder."

"But if no other be forthcoming?" queried Rhoda, "even then, Dick, I could never believe Edward"—in her excitement she was almost forgetting that she was speaking of the young squire with a familiarity beyond the usual, but she quickly corrected herself—"Edward Trethyn guilty of such a terrible crime."

Dick Fowler did not immediately reply. When he did speak, his voice trembled strangely.

"Is it true, Rhoda?" he asked.

"Is the talk true which is going about the parish? People are saying that he was arrested while talking with you at the door of your father's house."

"No—" she was beginning, when the truth dawned upon her. "Oh! was that what the con-

stables wanted? He was talking to me last night by the door of our house when the constables came and said that Superintendent James desired to see him. But, Dick, I had not the least suspicion that they were then arresting him, and I feel sure that he had no suspicion either."

A cloud passed over Dick Fowler's face, which if Rhoda's thoughts had been less occupied she might have noticed and at once interpreted in its true sense. But she did not, and Dick said nothing. He would very much like to have done so. He would liked to have pressed her upon her pledge to him of some months ago. But he recognized that then was not the time for doing so, and he crushed the impulse to do it in its very inception.

"Dick," said Rhoda, passionately, "I will go to the police-station and ask to see him."

"You must not do that," said Dick, with another pang at his heart.

"Why?" she queried.

"Because, Rhoda, it would look so."

"I can't help that," she said. "This is not a time to stand upon ceremony." And so, despite all Dick's fervid protestations, Rhoda at once took her way to the police-station.

She was, however, too late. Edward had been taken to the court. Thither Rhoda sped with all speed, and by the kindness of Constable Churchill was accorded a favourable seat.

The court was crowded. For only a very small proportion, however, of the hundreds of colliers who had gathered together could room be found, but notably amongst those who were fortunate to get seats were many of the chapel folk. Sir Charles Montgomery was there also, for the news had spread far and wide, and

he had driven over from The Bucklands in good time. As a magistrate of the county he took his seat upon the bench, but from the very first he declared his intention of having nothing to do with the case.

"I could never consent," he said, "to sit in judgment upon the son of my old lifelong friend."

Presently the presiding magistrate entered and took his seat. Immediately the hum and buzz of voices which had been going on ceased, and then the prisoner was brought in and placed in the dock. He was looking very pale, anxious, and careworn, and, at the sight of him, a feeling of profound sympathy went through the court. He came forward to the iron railing and grasped it firmly, as if to steady himself, but the magistrate motioned an officer to give the prisoner a chair. He had hardly seated himself when, looking up, he caught sight of Rhoda. He was thunderstruck, ashamed, and yet glad to see her there, and rose and saluted her gallantly. With tears in her eyes Rhoda returned the salutation, while the little circumstance aroused all the curiosity of the spectators, many of whom whispered to each other.

The prosecuting solicitor, who always prosecuted for the police, a Mr. Cordery, rose and briefly stated the case.

"I only intend," he said, "to offer sufficient evidence to justify a remand."

"As you please," said the magistrate; but a feeling of indignation came over those present, for they had thought it probable that Edward would have instantly been acquitted and the stupid officers who arrested him sharply reprimanded.

"Stephen Grainger!" cried Mr. Cordery, calling his first witness.

The agent stepped forward and

took the oath. He, too, was looking pale, but determined, and not a little vengeful.

"Is your name Stephen Grainger?"

"It is."

"Are you or were you the late Squire Trethyn's agent?"

"I was."

"How long did you hold that position?"

"About three years."

"About three years. Was there a riot in the park last night?"

"There was."

"The cause of it, I believe, was the exorbitant demand of the Dissenters in this parish—"

"Your worship," said Lawyer Jeffries, suddenly rising, "I submit we are not here to try the demands of the Dissenters."

"I merely wish," pointed out Mr. Cordery, "to lead witness up to the incidents of the crime with which the accused is charged."

"Exorbitant," contended Lawyer Jeffries, "is not a proper word to use in speaking of the Dissenters' demands. There are two opinions in this parish upon those demands, and I believe the late lamented Squire Trethyn and his worthy son, with whom we all must sympathize to-day, held opposite opinions on it."

A murmur of applause went through the court as Lawyer Jeffries sat down, and Mr. Cordery said he would withdraw the objectionable word.

"The cause of the riot," said the solicitor, turning again to the witness, "was the demand of the Dissenters ament some land?"

"I protest!" exclaimed Lawyer Jeffries, again rising. "This is not the case before the court."

"I think, Mr. Cordery," said the magistrate, "that you had better confine yourself to the charge."

"Very well, then," said the solicitor; "when the riot was at its

height, were you in the drawing-room at the Manor?"

"I was," answered the witness.

"Just tell the court who also were present."

"Squire Trethyn, Reverend Mr. Thornleigh, Lady Trethyn, and her daughters."

"Yes. Any one else?"

"No."

"Did anyone enter at this time?"

"Yes."

"Who?"

"The prisoner."

"What did he do?"

"He came forward into the room excitedly and commenced to quarrel with his father."

"What about?"

"He accused him as being the cause of the riot."

"What did the squire say?"

"He warmly resented it."

"Well, what then?"

"The prisoner threatened his father."

"What did he say? Tell the court the exact words."

"He told him that he would suffer for it within an hour."

"You are quite sure those were the words?"

"To the best of my recollection," said the witness. "Others were in the room and heard them also."

The solicitor paused and looked at the bench.

"Go on," said the magistrate.

"What then?" asked the solicitor.

"He went out, banging the door after him."

"Did he return?"

"Not immediately."

"When?"

"Some considerable time afterwards."

"You are sure of that?"

"Yes."

"Just tell his worship how you know it."

Stephen Grainger then related, with many embellishments, the

story of the dark figure stealing away from the squire's house, and ended by affirming that the figure was Edward Trethyn's.

"And you are quite 'sure of that also?"

"Quite."

"Next what happened? Tell it to the court in your own way."

"I then entered the house and called Squire Trethyn's name. He did not answer, and I called for lights. With the butler I then went forward into the drawing-room—"

"When you found your master lying on the floor?"

"Yes."

"Was he dead?"

"Quite dead."

"And that's all you know of it?"

"That's all."

Mr. Cordery sat down, and Lawyer Jeffries rose.

"Is it true, Mr. Grainger," he said, in the blandest of voices, "that earlier in the evening you and Mr. Trethyn quarrelled?"

Stephen Grainger hesitated a moment, and then said:

"Yes, if you choose to call it a quarrel."

"Was it a quarrel, or was it not? Answer the question."

"It was."

"And did you afterwards threaten the prisoner?"

"No."

"Be careful, sir. You were heard to say, when getting up from the ground, that you'd make Mr. Trethyn suffer for it. Is not that a fact?"

"Perhaps it is," answered the witness, sullenly.

"You admit it?" pressed the lawyer.

"Yes."

"At this juncture," said Lawyer Jeffries, turning to the magistrate, "I refrain from asking the witness any further questions."

"Reverend Phillip Thornleigh," called the solicitor, and that gentle-



man was speedily sworn. His evidence was soon taken. He was only called to corroborate the evidence of the last witness as to the exact words used by the prisoner in the quarrel with his father.

"Have you anything to ask this witness, Mr. Jeffries?" queried the magistrate.

"Nothing," answered the lawyer.

"Thomas Brown," and the next moment the butler was in the box and sworn.

"You heard what the last witnesses have stated in regard to the words used by the prisoner in the quarrel with his father?"

"Yes."

"Do you corroborate them?"

"I do."

"Where were you when they were spoken?"

"Just outside the drawing-room door."

"What were you doing there?"

"Passing to the library."

"And you distinctly heard the words?"

"I did."

"Did you recognize the prisoner's voice?"

"Yes."

"When Squire Trethyn's body had been removed and the room cleared, did you find something?"

"I did."

"What?"

"A small lance."

"Do you produce it?"

A small tortoise-handled lance was here passed to the bench, then to Lawyer Jeffries, and then to Mr. Superintendent James for safe custody.

"Do you know the owner of it?"

"Mine!" cried the prisoner excitedly, and Lawyer Jeffries turned to him and gently whispered, "Hush."

"It belongs to the prisoner?"

"Yes."

"You found it on the carpet near the window?"

"Yes."

"Probably dropped," explained the solicitor to the bench, "in the flight."

Mr. Cordery again sat down.

"Anything to ask the witness, Mr. Jeffries?" asked the magistrate.

"Just one thing," he said.

"You remember Mr. Trethyn buying the lance you have produced?"

"Yes, sir."

"For what?"

"To lance an abscess which had then formed in his mouth."

Then Superintendent James gave evidence as to the arrest of the prisoner, and Mr. Cordery informed the bench that he would call no further witnesses upon that day, and asked for a remand.

"There is sufficient evidence to justify it," said the magistrate. "The case, therefore, will stand adjourned for seven days."

"We offer bail," said Mr. Jeffries.

"This is a serious charge, Mr. Jeffries," said the magistrate. "I cannot but sympathize with your client. We must all do so, having known him so long and well as a gentleman of most exemplary conduct. . . But I'm afraid I have no power to grant your request."

The case was therefore remanded for a week, and Edward Trethyn was again taken into the custody of Superintendent James, and removed to the police-station.

And poor Rhoda Roberts went home desolate and heartbroken.

## CHAPTER XI.

### HAZARDOUS SCHEMES.

That same evening, by the kind permission of Mr. Superintendent James, Rhoda was accorded a private interview with the prisoner.

"Rhoda!" he exclaimed excitedly on seeing her, "Why have you come here? Surely this is no fitting place for you."

"Not for you either, Edward," she replied, smiling through her tears, and endeavouring to show a brave heart. "Oh, Edward, Edward! this is an awful thing that's brought against you."

"But it is false!" he cried.

"Yes," she answered, "I am sure of it, and so are all who know you well. No one believes it."

Through the mist of tears which was fast gathering to his eyes he thanked her heartily and sincerely for her kind words. They did him good, he said. To be acquitted by his friends, and especially by her, afforded him peculiar satisfaction.

"Rhoda," he said, impressively, "as God is my judge, I am as innocent of this foul crime as you are, and I shudder to think that I can be charged with it. Believe me, dear Rhoda, when I was with you last night, and when I left you and went away with the constables, I knew no more about the crime than that," snapping his fingers.

She was sure he did not, and she told him so.

"But how wicked of them to bring so terrible a charge against you."

"Them?" he said, not catching her meaning.

"I mean those who did it," she explained.

"Don't you know who did it?" he said. "You were in court this morning. It is wholly and altogether Stephen Grainger's doings. But, Rhoda, when I again get my liberty he shall march. He shall not remain another hour on the estate, or act as agent a day longer. I am the Squire of Trethyn now."

The Squire of Trethyn! The words startled Rhoda. She had never given the matter a thought. All her concern had been for him. But, oh! how the words thrilled her. For his sake she was glad;

but for her own, sorry. A gloom settled upon her. How could she ever hope now to be his wife. Now there was another barrier to their union, but, unlike the one she had raised, this could never be broken down.

"A little week," he went on, "and I shall right all wrongs. I shall bring back all the tenants my father evicted, an injustice, Rhoda, which never would have been done but for Grainger. Poor Snooks shall have his cottage back again and his rent readjusted. And, Rhoda, tell Seth—tell your father that his people shall have the land they have so long asked for. They shall have it free; not a cent will I accept in return for it. And—"

"Oh, thank you, Edward!" she exclaimed fervently; "but my anxiety is now all for you. If they should prove you guilty."

"Absurd!" he exclaimed; "how can the innocent be proved guilty?"

"But the law has so many queer turnings," she said. "If the jury should return a verdict of guilty—"

"No jury can do it," he said confidently; "that is the pride of Englishmen. No innocent man can be found guilty before an impartial jury."

"Pray God," she said, "that it may be thus in your case. And, Edward, I am praying for you, and all our people. You must look up."

"My trust is in God," he said; "I shall never be confounded."

Now it was his words that did Rhoda good, and she felt intensely glad and thankful to hear him thus express himself.

"Rhoda," he whispered, "what news of the rioters?"

"Oh," she said, "bad news. Mr. Grainger has ordered ever so many arrests, and Rake Swinton and several others have been camped."

Edward's anger knew no bounds.

"The scoundrel!" he cried. "Rhoda, not a single man shall be arrested. I absolutely forbid it. There would have been no riot had there been justice and toleration. I don't countenance outrage. I detest it, and would punish severely those who take part in it, but I detest and would punish injustice much more. A week from now and I shall be free again. Then—"

A week! But before that week had passed away the coroner had held the inquest, and a post-mortem examination had been made of the body. Dr. Burns, assisted by another medical gentleman, had carefully performed their ghastly duties, and they had come to the conclusion that the Squire of Trethyn parish had died by poison, but of what nature they could not be sure. Hence they had sealed up several of the deceased's organs, such as his kidneys and parts of the intestines, in great glass jars, and had sent them to the public analyst for expert opinion upon the matter. But the discoveries which they had made were quite sufficient for the coroner's purposes.

"Then you are of opinion," he asked Dr. Burns, "that the deceased died from the effects of poison?"

"There can be no doubt about it," said the doctor.

"You swear it?"

"I do."

"In what state were the other organs of the body?"

"Perfectly sound."

"And healthy?"

"And healthy."

"And therefore I may take it that the deceased might have lived for years if ordinary circumstances were continued?"

"Yes."

"Very well, Dr. Burns. We will now hear your assistant."

The other medical gentleman was then called, and stoutly confirmed Dr. Burns' evidence in every particular.

Nothing now remained but to bring the crime home to the accused, and, to the law's satisfaction, this was speedily done by the repetition of the evidence Stephen Grainger and the butler gave before the magistrates, with particular mention of the lance, and then the coroner summed up.

"It was a curious case," he said, "and the crime was one of a peculiarly revolting character. At first there seemed much mystery surrounding it; but, after all, it was not so mystical as it seemed. It was really a crime of a very common nature, and of frequent happening—one of those vulgar crimes, if he might use the word. The jury had heard the evidence. They had heard what the doctors had told them. The deceased had died by poisoning. There could be no doubt about that. Of all kinds of evidence, medical evidence—scientific evidence—was the most trustworthy, and the jury could rely upon it. But whose hand administered the poison? Or, rather, who was the dastard that used the lance in this instance, for it was apparent that the poison had been scratched from the lance into the blood? The jury could hardly be in doubt about it. The evidence was so strong, and it all pointed in one direction. For himself, he had not the shadow of a doubt about it. Of course the jury might have, and if they had they must give the accused the benefit of it. He would leave it with them."

Thus charged, the jury took but little time to consider their verdict.

"Are you all agreed?" asked the coroner.

"We are," said the foreman.

"Do you find that the deceased gentleman died by poisoning?"

"We do."

"By whose hand was the poison administered?"

"Edward Trethyn's."

"Then you find him guilty?"

"We find him guilty of wilful murder."

The coroner swung round in his chair and faced the court, with an expression that plainly said, "An intelligent and impartial jury could not have returned any other verdict."

But many people in the court thought otherwise, and to them the verdict came as a manifest surprise. But to none more than to Edward himself. He was completely prostrated by it, and from the moment he heard it began to lose heart entirely. Hitherto the strong consciousness of his innocence had kept up his spirits, but now he realized that it was a fearfully possible thing for even English juries to err, and for the innocent to be proved guilty—that was, proved guilty to the law's satisfaction. The thought appalled him and chilled his blood. What should he do? What could he do? He had done all that was possible, and Lawyer Jeffries had fully, clearly, and powerfully stated his case, and, to all rational men's thinking, had successfully proved an alibi. But what of that when the verdict went against him? Now he might expect the worst to happen. Yes, horrible thought as it was, he might now expect to be condemned by any tribunal. And, indeed, when the week passed away and Edward was brought up on remand before the magistrates, this hopeless feeling was shown not to be without reason by his case being committed to the Assizes.

"The evidence," said the presiding magistrate, "is of so pecu-

liarily striking a character, and points so much in one way, that there is no other course left to the Bench but to send the case to the Assizes."

Edward now lost hope entirely. He was in terrible despair, and his very nature revolted at his cruel fate. Not so Rhoda. She did not give way to despair, but day by day visited the cell in which Edward was now confined, and did everything in her power to cheer and to comfort him.

"English judges," she said to him one day, "are keen and swift to sift the truth, and you will be sure to be honourably acquitted."

Edward only shook his head sadly and in doubt. In their feelings they had changed places: a week ago it had been he that was filled with hope, and she that was in doubt and terror. Now things were reversed.

"No," he said despairingly, "if the judges were themselves convinced of my innocence, they could only proceed on the evidence."

"But the evidence is untruthful!" cried Rhoda.

"Strong enough to condemn me," he said.

"Never!" she replied. "Oh! you must not give way to despair."

"So far," he said, wearily, "it has condemned me, untruthful though it is. How can I hope for acquittal now?"

"But, Edward," she persisted, "the judges are not like the petty magistrates. They are gentlemen skilled and learned in the law, and know when to put their finger upon unreliable evidence. Depend upon it, Stephen Grainger and his lies won't dupe the judges, though they have the magistrates."

But Edward only shook his head again, and said in a broken voice, "I shall be condemned—falsely condemned."

"If such a thing could be possible, Edward," she said, "I trust

you will always remember that there is one who believes you guiltless."

He could not speak his thanks; his heart was too full. But he attempted to smile them through his misty eyes—a faint, sickly attempt at a smile, and wholly unlike his usual brightness.

"Ay, Edward," she went on, "and there are scores and scores of others in this parish who will never believe you guilty, and who will stand by you in faith and confidence to the end."

He was touched to the depths of his soul with deep emotion, and in spite of himself the hot tears rose to his eyes. Presently he mastered it for a while, and then he drew Rhoda near to him and whispered something in her ear—whispered it with quickly pulsing heart and anxious face—whispered it so low that not even the most vigilant official who might have been within earshot for ordinary conversation could have heard what he said. Even Rhoda herself seemed hardly to catch the words, or it was perhaps what he said that appalled her, for she started fearfully.

"Edward!" she could only exclaim in a hoarse, incredulous whisper.

"I will do it," he said firmly.

"But the risk?"

"Here," he said, "it is scarcely anything, but it may be more difficult soon if I delay. Should I be removed from here it might become utterly impossible."

He still spoke in the same hoarse, mysterious whisper, glancing all the while toward the door of his cell as if fearful of being overheard.

"Oh, Edward!" she said, "I tremble for you."

"Why should I not attempt it?" he asked impatiently. "Shall I stay here until they hang me?"

His gruesome words sent a cold

shiver through Rhoda's already creeping flesh and blanched her cheeks.

"Would you have me stay for that?" he whispered somewhat ungraciously.

"No, Edward," she replied quickly. "How can you ask me such a thing? But I—"

"Rhoda," he said, interrupting her impatiently. "I know your scruples, and respect them. Under ordinary circumstances I too should have just the same scruples; but my case is not an ordinary one, but an exceptional one, and therefore lying and duplicity must be met by other than ordinary means."

Rhoda's hesitation was breaking down. Though she still feared because of his proposal, she could not help feeling that there was a good deal of justice in what he said. Nevertheless she made one more effort to dissuade him from the projected attempt.

"But, Edward," she said, "won't such a thing give colouring to the verdict already brought against you?"

He was struck by the question.

"I don't know," he said slowly. Then, after a moment's consideration, he asked quickly, "But what of that?"

"It might alter the good opinion of those who now believe in your innocence," she answered. "Even your friends might then distrust you, and that, Edward, would be awful. Just think of it—to be blamed and condemned by those who love you."

"Would you condemn me, Rhoda?"

"No, never—never," she asserted.

"Would you believe me guilty?"

"No, Edward. Why do you mistrust my word?"

"I do not mistrust you, Rhoda," he said feelingly. "I was only thinking that if you still kept faith

in me I shouldn't care what others thought."

"But, Edward, I should care," persisted Rhoda. "I would not like to hear any one condemn you, especially old friends."

"True, true," he said musingly; "but, Rhoda, whether is it better to stay here, condemned falsely—condemned to die—accused only by your enemies and by vile traducers, or to be free, though condemned by all who know you? I confess to you freedom to me is desirable above all things. I should go mad here. Besides, while I'm confined here, Rhoda, I can do nothing to establish my innocence."

Poor Rhoda could not but admit the truth of this argument, and stood pondering a moment as if deciding how to act.

"Well," he queried in an undertone, "will you help me, Rhoda?"

The question startled her. She had not suspected that he would have looked to her for help in this matter. She had thought that what he proposed he would do himself, and the question he now put so pointedly to her was one of serious import.

"You can be of good service to me, Rhoda," he said, quick to observe her hesitation—"service such as no one else can be."

"In what way?" she asked.

"Listen;" and he then whispered a few words into her ear.

Now she was speechless with amazement. She did not know what to say. All the risk she had warned him against was nothing to this. But she was not unwilling to do what she could for his release. The questions uppermost in her mind were—"Was this thing right? Was it a sin? Would she offend Almighty Justice if she attempted it?" What should she do? It was a matter that required immediate decision, not one that could be put off for

consideration. There was Edward waiting before her, trembling for her answer, and she could not possibly leave him with the promise to answer him another day. The delay of a day might prove fatal to its success.

Not long was she left in doubt. While she stood considering, swift as lightning came the thought to her, "Edward is innocent; why, then, should he be condemned for another's crime? That, at least, is not God's pleasure."

"Will you do it, Rhoda?" urged Edward.

"Yes," she whispered firmly, "I will do it, and may God help me."

"God bless you!" he answered, his eyes full of tears, "and God will help you, and He will help me also. Rhoda, He will never allow the innocent to perish; to suffer He may, but to perish, never. The success of our effort shall be a proof that God is with us."

His words inspired her with hope and with a holy determination. When she left him that evening it was with a strong and solemn resolution to strain every nerve and fibre of her being to compass his escape.

Home she went quickly, and told her father all about it. To her glad surprise he entered into the scheme heartily, and promised to do everything he could to bring it to a successful issue.

"But, father, no others must know of it," she said.

"Not a soul," he answered, "except—Him," and he pointed reverently upwards.

"Yes," she answered, "we must tell Him all about it," and there and then, on their knees, before the Judge of all men, before the Judge who cannot be deceived, they told all their hearts' plans and desires; the stout old fireman pouring forth a prayer, the burden of which was that the righteous

should not be slain for the sinner's guilt, that the prey should be taken from the mighty, and that the unlawful captive should be delivered.

Later on that same evening Dick Fowler called to see Rhoda, and Seth went out to chapel.

"The talk is," said Dick, when he had sat down, "that the agent will be put into full control of the Trethyn 'states until—"

Until when? Dick was going to say, what just then was very common gossip, until the execution took place and the new heir came into possession, but he bit his lips hard, and ended by saying, "until things be properly settled."

"That can never be," said Rhoda. "Even supposing Edward Trethyn were found guilty, he would make a will, and you may be sure Stephen Grainger would be given no part in the management of the estate. Indeed, he has told me this much already."

"Of course," said Dick; "I didn't think of that. I'm glad on it, Rhoda; an' it'll just put a blocker in Grainger's way. He has heard what Mr. Edward told you about the land—"

"Has he?" queried Rhoda excitedly. "What did he say?"

"He was very furious over it, and swore that nothing would ever

make him go 'gainst Squire Trethyn's intentions."

"He'll find," said Rhoda, "that he'll have to speedily alter his opinion."

"I sometimes wonder," said Dick, "whether God sees everything that happens, and, if so, why He allows it. Grainger's worse than ever now since squire died. He says he'll give the people rioting, an' he's had notices to quit served on the people in th' Cane Row."

Rhoda clasped her hands.

"You don't mean it!" she exclaimed.

"I do," answered Dick; "an' I un'erstand there's more to follow."

"Oh! whatever will the poor people do?" cried Rhoda. "There's no more houses in the place, and the winter's coming on. Oh, how wicked of him! But God will judge him for it."

"If Mr. Edward—" Dick was beginning.

"Oh, yes," said Rhoda; "I had forgotten for the moment. Mr. Edward will soon right it all when he's released;" but deep down in her heart she felt that before Edward could even think of righting it he would have first to establish his innocence in all men's eyes, and that the matter upon which she and he were now bent was not the speediest way of doing it.

---

#### IN AUGUST.

The echo of a whispered word,  
A fleeting cadence low and sweet,  
Fresh as the songs the streams repeat,  
Faint as the croon of nesting bird.

A deeper azure in the sky,  
Fields gleaming gay with green and gold,  
Closed wings that droning half unfold,  
A summer passes slowly by.

A breath of sadness scarcely caught,  
A minor note to swell the strain,  
A blossom bowed by falling rain,  
Gold strands with silver subtly wrought.

O, rare unfathomed August days,  
Rich with the glories of the past,  
What will you bring us forth at last?  
What lurks beneath your hovering haze?

## THE NEW APOLOGETIC.\*

BY REV. PROF. E. I. BADGLEY, LL.D.,

*Professor of Ethics and Apologetics, Victoria University, Toronto.*

We have read this book with no little interest. Dr. Terry has a strong and very pleasant way of expressing his views. The book is quite up-to-date; and upon many points is quite in advance of what we had believed to be the positions generally held by the Church in which he has been for so long a time a distinguished teacher. The five lectures review and present the subject from as many different view-points.

The first is an able historical review and classification of attack and defence. Every age is marked by its own special features, and calls for a special presentation of the claims of Christianity. At one time it is attacked on historic grounds, at another the conflict is with physical science, at another the prominent feature is literary criticism. Just now the storm-centre would appear to be the effort to analyze the various books into their original sources.

It is the business of Apologetic to meet objections; "prove all things; hold fast that which is good." Christianity cannot expect to have its doctrines accepted without investigation. It must be put upon trial side by side with every other system of thought and life, and if unable to make good its claims it must be rejected just like any other theory that has had its day and ceased to be. Not dogma, but truth alone is sacred; and equally sacred are its claims upon our consideration and investigation. Attacks upon Christianity may arise from ignorance, superstition, or any other similar causes. It can be easily understood that the remedy in such cases is the banishment of their causes, namely, the awakening of intelligence and the spread of knowledge.

But in addition to these there are various forms of attack, or of opposition, of a more respectable character with which Christianity may always expect to reckon. However pretentious may be the announcement made now and again

that some theory has been discovered by which all difficulties may be satisfactorily explained, we confidently expect that "history will repeat itself," and that the future will experience difficulties not altogether unlike those of the present and past.

These in some form or another date from apostolic times. The philosophic sects of Greek thought disputed with Paul. The Jewish Rabbis were themselves not strangers to literary criticism in connection with the Old Testament. Within the Church itself Dionysius, Bishop of Alexandria, "produced one of the finest specimens of higher criticism extant, taking the ground that the Apocalypse was not the work of the apostle John." Further, we have but to mention the names of Celsus and Porphyry among the early opponents of Christianity to show that modern methods are not without their early representatives.

Again, not altogether modern (witness the cry—"Great is Diana of the Ephesians") is the demand made upon Christianity in relation to other religions. Look at the bare enumeration of the names of some of these—Confucianism, Brahmanism, Buddhism, Mohammedanism. Have all of these great systems—most of them with followers almost innumerable—any claims by which they can plead acceptance? Unadulterated error cannot maintain itself with so many followers and for so great a length of time. Are the truths in these non-Christian religions as certainly from God as are the same truths when accepted by Moses or Isaiah or Paul?

From these statements it may be seen that Christianity has been and will continue to be assailed from three standpoints,—(1) Rationalism; (2) Literary Criticism; and (3) Comparative Religions. The last mentioned is the only one of the three that we can conceive as finally disappearing.

Under the first will come the fourfold controversy: (a) Dualism. Are two eternal principles necessary to explain the phenomena of the world? Every student of Church history is familiar with the breadth, depth, and significance of

\* "The New Apologetic. Five Lectures on True and False Methods of Meeting Modern Philosophical and Critical Attacks upon the Christian Religion. By Milton S. Terry, D.D., LL.D. New York: Eaton & Mains. Price, 85c.



this controversy. (b) Is Monism the theory that best commends itself after due investigation; and, if so, shall our conception of it be idealistic, materialistic, or pantheistic? (c) Natural science in relation to the origin and government of the world; origin and destiny of man; law and miracle on the one hand, and law and freedom of will on the other. Along these lines the battle-ground to-day centres in the one word—Evolution. (d) And last there looms up before us that horrid spectre “Agnosticism.” After all can we know anything? What, at best, are the limitations set to human knowledge? How far can we with safety make any affirmation or negation concerning that which transcends experience? What is the boundary line between the seen and the unseen, between knowledge and faith?

These and cognate questions the Christian apologist cannot set aside. However much they open out into other fields, they have both a root and a branch here and are not to be lightly thrust out of the discussion. Truth is a unit and all of the sciences are but several ways of viewing it from different points of vision.

In the lecture entitled “The Literary-Critical Apology,” the author holds that we can no longer regard many of the Old Testament books as written by those to whom they have been commonly accredited. The main point is to “recognize the great difference between questions of literature and those of fundamental doctrine. Whether Paul or Apollos or Barnabas or Luke wrote the Epistle to the Hebrews is a question of literary history, and its determination

one way or another will not affect the value of the Epistle nor the essentials of the Christian faith.” He sums up “the spirit, principles, and methods of the true literary-critical apology for the Bible” in the following propositions: (a) “We should have a definite and rational conception of *what the Bible is.*” (b) “The true apology will take pains to show that the Bible is a very human book.” (c) “The true apology will take pains to examine all critical questions of date and authorship and composition.” (d) “It must not be forgotten that there were many revelations of God’s truth given to men before any part of the Bible was written.” To these are added a fifth, too long for insertion here, but pre-eminently practical and helpful.

In the apology of comparative religion the whole matter resolves itself into an answer to the question, “Which of the great religions reveals to man the highest, best ideal of God?”

Throughout the volume the author aims to be practical. He addresses himself to a popular audience. Before publication they were “read before various bodies of ministers and theological students.”

He closes with a fifth lecture, entitled “The Positive Apology.” In the positions here taken we find, among others, the great secret of Methodism—personal experience in Christian salvation.

We commend this volume to all our readers as thoroughly safe, timely, and eminently helpful in relation to the great truths of our holy religion. The young people in our Leagues and Endeavour Societies would be greatly blessed and profited by its perusal.

---

HOLY LAND.

This is the earth He walked on; not alone  
 That Asian country keeps the stain;  
 'Tis not alone the far Judean plain,  
 Mountain and river! Lo! the sun that shone  
 On Him shines now on us; when day is gone  
 The moon of Galilee comes forth again  
 And lights our path as His; an endless chain  
 Of years and sorrows makes the round world one.  
 The air we breathe He breathed, the very air  
 That took the mould and music of His high  
 And Godlike speech. Since then shall mortal dare  
 With base thought front the over-sacred sky,  
 Soil with foul deed the ground whereon He laid  
 In holy death His pale immortal head!

—Richard Watson Gilder.

## THE FEDERATION OF THE EMPIRE.

“ This England never did, nor ever shall,  
 Lie a’ the proud foot of a conqueror ;  
 But when it first did help to wound itself.  
 Come the three corners of the earth in  
 arms,  
 And we shall shock them. Nought shall  
 make us rue  
 If England to herself do rest but true.”

The federation of the world-wide British Empire has received a impulse during this Queen’s Jubilee year such as it never received before. The presence of the Premiers and representatives of the scattered British colonies, and of stalwart colonial troops from Canada and the Cape, Australia and New Zealand, from India and Ceylon, with their picturesque garb, bronze complexion and dauntless bearing, were an object-lesson of the extent and variety of the resources of the empire.

One of the most marked tendencies of the times is that towards integration, both in religious and political communities. The time for breaking down seems to have passed away, and the time for building up to have come. The unification of Italy and Germany, and the conservation of the American Union, are illustrations of this tendency. The unifying of the British Empire would give it its greatest exemplification. If there be burdens to bear in order to realize this grand idea, we should share them. The numerous and noble progeny that Britain, the great Mother of Nations, has nourished and brought up should begin to bear their part in the maintenance of national defence and the support of the national dignity. The cost of the West Indian and Pacific squadrons and of the British garrisons that belt the globe should not be borne disproportionately by the overtaxed peasants of Dorset and Devon, of Tipperary and Inverness. The wealthy colonies of Canada and Australia, New Zealand and Ceylon, and their fair and flourishing sisters around the world, should contribute equitably to the maintenance of that protection which they enjoy no less than those who live beneath the guns of Chatham and Plymouth.

There are, doubtless, grave problems of statecraft to be solved before all the alien interests of so many diverse peoples can be harmonized, but the grandeur of the object is an inspiration to the effort, and the difficulty of the task but enhances the glory of its achievement. Never was nobler field for statesmanship, nor sublimer reward for the man who, not by

“ blood and iron,” but by peaceful diplomacy shall weld into indissoluble national unity all the British colonies throughout the world.

Such a federated empire would be the pledge of peace and the bulwark of civil and religious liberty throughout the world. It would defy the combined powers of all its foes, would become the umpire for the settlement of all international disputes, and would render possible the general disarmament of nations. It would surpass in territorial extent and power all the empires of antiquity, would open to its sons a career of splendid and honourable ambition, and make the proud “ *Civis Romanus sum* ” pale into faded splendour before the grander boast, “ I am a British subject ; ” and would speed the world on a plane of higher progress and loftier civilization than ever before.

Unless such federation take place, in less than a hundred years the grand old Mother of Nations will be dwarfed into insignificance by the prodigious growth of her stalwart offspring. She who so long led the van of the world’s progress will falter a laggard in the race, and this great and noble empire be broken up into separate and perhaps estranged and antagonistic though kindred peoples. Rather, as her far-off and innumerable children rally in undying affection around the dear old mother of us all, renewing her youth in their unfading prime, let them say :

“ The love of all thy sons encompass thee,  
 The love of all thy daughters cherish thee.”

The example of Canada, both in the federation of the scattered provinces into a great Dominion, and in the union of different branches of the Presbyterian and Methodist families into united Churches, is having its effect at the Antipodes. We have spoken elsewhere of the movement toward Methodist Union, which is sure to be accomplished in the near future. This the success of Methodist Union in Canada has greatly aided. The meeting of the Australian Premiers, with other statesmen of the Empire, in London, we believe, has contributed to its political integration.

The plan of federation provides for a governor-general appointed by the Queen, and a Federal Parliament, composed of a Senate and House of Representatives. The Parliament is to have control of the tariff and the taxes, and of military and

naval affairs, while the administration of local matters is to be left entirely to each colony. Trade among the colonies is to be free, but the federation may establish what tariff legislation it chooses. Another session of the Convention will be called for final action, and then the constitution is to be submitted to the colonies, to take effect if adopted by three of them.

Joseph Cook thus describes the grandeur of the British Empire :

"I have passed many months in England, and looked into the faces of impressive audiences in all the great towns of the British Islands; but when I sailed away from the white cliffs of Albion, I did not seem to have seen the British Empire. I floated through the Mediterranean with many thoughts of Gibraltar, Malta, Cyprus, and other British ports. I came to the green and black and yellow plains of the pulsating Nile, over which England has practically a protectorate. I came to Aden, a twisted cinder of red rock, carved into military might, the Gibraltar of the gate to the Indies. I sailed into the Indian Ocean and looked back, and did not seem to have seen the British Empire. I gazed over my ship's side, southward and westward, and remembered the immense British possessions at the Cape, and the British prominence in the Soudan and in the Valley of the Congo, but did not seem to have seen the British Empire.

"One tropical morning, there arose out of the purple and azure seas, far to the east, queenly Bombay, second city of the British Empire, and I studied its proud fleets, its stately wharves and public buildings, its university and schools. I crossed crowded India and saw the Taj Mahal and Himalayas looking down on a land in which Britain rules twice as many people as any Cæsar ever governed. I studied Calcutta, the most cultured city in Asia; visited Madras on her blistered sands, and so came to that rustling paradise of the tropics, Ceylon, and I sailed away and looked backward, but did not seem to have seen the British Empire.

"I came to Singapore, at the foot of the Malay Peninsula, within eighty miles of the Equator, and found a harbour alive with British fleets and a city busy with the richest trade of the East Indies, under the British

flag. I sailed away to Hong Kong, and found a mountainous island, with a beautiful city on a magnificent harbour full of British fleets. I sailed away to Japan and back to China, finding British quarters prominent in every seaport.

"I sailed southward through the East Indies, and was almost never outside of the British flag. The shadows began to fall southward at noon. The days gradually grew cool. Strange constellations rose out of the sea. In July the blasts of the northern December came up from the icebergs of the Southern Pole. There lifted itself, at last, from under the ocean, a continental island, slightly less than the whole territory of the United States. I studied the pastures, the forests, the mines, the thriving and cultured cities of Australia. I saw verdant Tasmania and green New Zealand, and sailed away with the Fijis over the gunwale towards the sunset; and still I did not seem to have seen the British Empire.

"After many days the shadows fell northward again at noon. The Sandwich Islands rose to view, and I remembered that over them the British flag once floated for a day and an hour; and I sailed away and looked backward, but even yet did not seem to have seen the British Empire.

"It was only when half-way between the Sandwich Islands and America I remembered that the British possessions stretched across this continent from sea to sea, and that our own land was once preeminently British. It was only when, at last, my lonely eyes came to the sight of America, my own, and my thoughts went back around the whole earth, that I suddenly obtained, by a combination of all my memories, a conception of the physical and political dignity of the British Empire as a whole.

"Not more than a century or two distant lies, in the possible, not in the certain, future, an alliance, I do not say a union, of all the English-speaking peoples, Great Britain, the United States, Australia, India, belting the globe, and possessed of power to strike a universal peace through half the continents and all the seas."

What a federation that would be!—a pledge and augury of the millennial age,

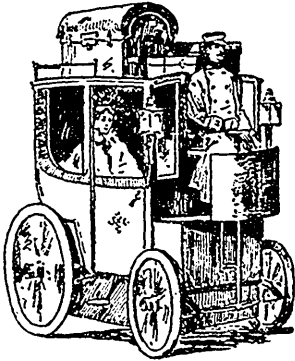
"When the war-drum throbs no longer and the battle-flag is furled,  
In the Parliament of Man, the federation of the world."

O mighty Potter, to whose steadfast eyes  
A thousand years lie open as one day,  
Thy patient hand set firm on life's great wheel  
This heavy, shapeless clay.

Rough and imperfect, yet it owns Thy touch;  
Spare not, nor stay, the pressure of Thine hand;  
Make known Thy power; and, soon or late, let love  
Perfect what love hath planned!

—L. H. Hammond.

## HORSELESS CARRIAGES.



ENGLISH ELECTRIC CAB.

In England and France the horseless carriage is already in somewhat common use. France has taken the lead in building these "automobile" or self-propelling carriages. Until recently they were considered interesting pieces of mechanism or curious playthings rather than practical vehicles. But in June, 1895, a race was arranged in which any horseless carriage could enter, the course being over the ordinary highway: from Paris to Bordeaux and back, a distance of seven hundred and forty-four miles. Large prizes were offered to the winner of the race, and twenty-seven vehicles started. Eighteen were propelled by petroleum, seven by steam and two by electricity.

The road offered all the conditions usually met in travel through the country—sand, mud and steep grades—and the race was, therefore, an excellent test. One-half of the twenty-seven starters completed the trip successfully.

The winner was a petroleum vehicle which carried four passengers, and averaged twelve and one-half miles an hour over the entire course. This proved that the horseless carriage was a thoroughly practical thing, and since then inventors have studied its possibilities.

Four kinds of motors have received the most attention: steam, electricity, petroleum and compressed air.

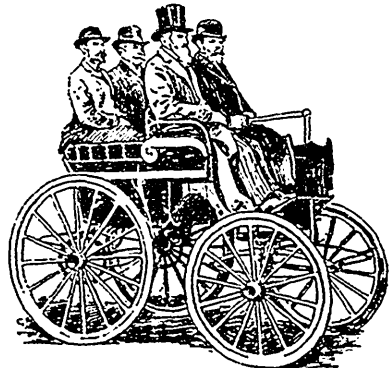
The advantages of steam are its great power and the ease with which the materials to generate it—fuel and water—can be obtained anywhere; but it is noisy, the machinery necessary to its use is cumbersome, and the heat, ashes and cinders are disagreeable.

Petroleum is cheap, obtainable almost everywhere, and the motor which uses it is very simple and compact. Its objectionable feature is its unpleasant odour; but this has lately, in American machines, been almost eliminated.

Electricity is noiseless and odourless, and generates no disagreeable heat. But the storage batteries which propel the carriage must be frequently recharged, and it is not always easy to buy a can of "electric juice" of the country grocer as one buys a can of tomatoes.

The use of compressed air to propel street cars in New York has shown it to be an admirable motive power. It is noiseless, odourless and clean, and the mechanism which it operates is simple and effective.

The air is stored, at enormous pressure, in steel tubes of such toughness that, if an explosion should occur, no one would be injured; for the steel tube, instead of



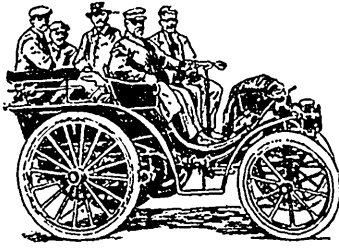
HARTLEY STEAM MOTORCYCLE.

flying into pieces, merely rips, like a leather bag, and the air escapes, with a startling "whish," no doubt, but without disastrous results.

The small space occupied by these steel tubes of air, and the great power which can be exerted through the simple machinery, make compressed air a very promising motive power for horseless carriages.

Experiments so far seem to indicate that steam offers advantages for heavy draught waggons, but that, for passenger carriages, one of the other motive powers is better.

A law restricting the use of automobile vehicles on English highways has been



FRENCH HORSELESS CARRIAGE.

repealed, and a company organized in London, with a capital of \$750,000, to provide a service of three hundred and fifty electric cabs.

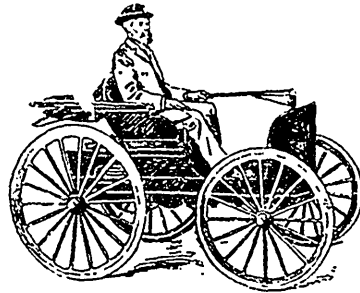
These cabs differ very little in appearance from an ordinary carriage, except that the horse is wanting. They are fitted comfortably and even luxuriously. The driver sits in front, and steers and regulates the speed of his vehicle much as the motorman controls an electric car.

The drivers are able to hire these cabs from the owners for five shillings, seven and one-half pence a day—about one dollar and forty cents—or less than half what they have been obliged to pay for a cab with a horse. The cost of running the French petroleum carriages is from thirty to forty cents a day.

Trials of horseless carriages in this country have shown that American inventors are in advance of their foreign competitors. The American machines are neater, lighter, more compact and more pleasing to the eye than those made in France or England, and they are also

superior in speed, twenty-eight and thirty miles an hour having been made on smooth roads, and at a cost of one-quarter of a cent a mile.

The horseless carriage promises by its cheapness of operation to give a vehicle which can be brought to the curbstone to receive passengers, at a fare not exceeding five cents. It may, therefore, do away with the jerky and overcrowded cable and electric street cars, offering in their place a noiseless, smooth and comfortable conveyance.



DURYEA MOTOR CARRIAGE.

Up to the present time the best automobile carriages have cost from \$800 to \$1,200, and this necessarily high price has doubtless restricted their use; but that is a matter which time and competition will regulate, and it is probable that in a few years an automobile vehicle in the street will attract no more attention than a bicycle.

---

## CURFEW-TIDE.

BY S. CORNISH WATKINS.

The thrushes sing in every tree ;  
 The shadows long and longer grow ;  
 Broad sunbeams lie athwart the lea ;  
     The oxen low ;  
 Round roof and tower the swallows slide ;  
 And slowly, slowly sinks the sun,  
     At curfew-tide,  
 When day is done.

Sweet Sleep, the night-time's fairest child,  
 O'er all the world her pinions spreads ;  
 Each flower, beneath her influence mild,  
     Fresh fragrance sheds ;  
 The owls, on silent wings and wide,  
 Steal from the woodlands, one by one,  
     At curfew-tide,  
 When day is done.

No more the clanging rookery rings  
 With voice of many a noisy bird ;  
 The startled wood-dove's clattering wings  
     No more are heard ;  
 With sound like whispers faintly sighed,  
 Soft breezes through the tree-tops run,  
     At curfew-tide,  
 When day is done.

So may it be when life is spent,  
 When ne'er another sun can rise,  
 Nor light one other joy present  
     To dying eyes ;  
 Then softly may the spirit glide  
 To realms of rest, disturbed by none,  
     At curfew-tide,  
 When day is done.

## THE THIRD INTERNATIONAL EPWORTH LEAGUE CONVENTION.

The Epworth League Convention was, next to the Ecumenical Conferences, the most important Methodist gathering ever held ; indeed, numerically it far exceeded the Ecumenicals, although not representing so many branches of the Methodist family. No such great gathering of the adherents of Methodism has ever taken place as that recently held in our midst. It was an inspiration to see the tribes of our spiritual Israel coming up from the east and west and north and south to



BISHOP NINDE.

take counsel together as touching the things concerning the kingdom of God. It was not merely for a numbering of the tribes, nor for a dress parade ; but to wait upon God, to catch inspiration from the contact of mind with mind, from a sense of wider brotherhood, and to receive as a result of a divine baptism a more conscious spiritual power. It was to form new and nobler ideals of Christian manhood and womanhood, of Christian consecration, and of Christian citizenship.

The key-note of the convention was enthusiasm for missions. This is in harmony with the quickened interest in this vital topic of the age. This is a fulfil-

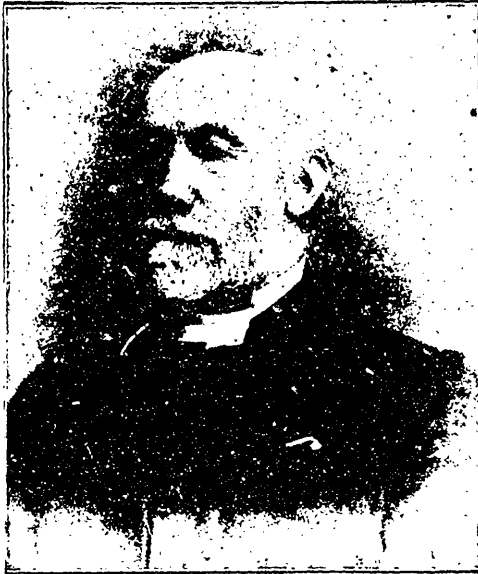
ment of the Scripture : " I will pour out my Spirit upon all flesh ; and your sons and your daughters shall prophesy, your old men shall dream dreams, your young men shall see visions."

This organizing of the young life and young blood of all the churches as never before for Christian culture and Christian service is one of the most significant signs of the times. It means that the Church of God shall march through the gates of the opening century better equipped, better trained and drilled for aggressive warfare on the hosts of evil than ever before.

The League stands, too, for an intelligent Christianity, for a deeper knowledge of the Word and works of God, a better appreciation of the social and economic questions of the times, a better conception of God's providential dealings with the race and with His Church, a better ability to discover the hand of God in history, and learn the lessons which the past has to teach the present.

There are great questions to be solved in the future. Many of them are pressing for solution even now. The Epworth Leagues are an important factor in solving them. With the zeal and enthusiasm of youth not yet burdened with the engrossing cares, and business perplexities, and domestic duties of their seniors, they can devote their energies to high Christian endeavour for the Church and for the State. Among the various lines of usefulness in which they can operate is, first, that of temperance reform. In the Plebiscite campaign, in urging local restriction, in promoting individual moral suasion, in lifting up the fallen and succouring the wounded on life's highway, they may play the part of the good Samaritan and abundantly win his great and everlasting reward. Other aspects of good citizenship invite them to stand up for Jesus and His cause.

We are specially glad to know that so many of our Leagues are organizing on aggressive missionary lines. Several districts are combining to maintain their own missionary on the high places of the field, to besiege the gates of heaven in prayer on his behalf, to keep up a living



REV. DR. CARMAN.

tie of correspondence between the missionary and the League district, and so to come into closer touch with this great movement for bringing the world to the feet of Jesus, for lifting it up nearer to the heart of God.

We are glad to present herewith portraits of some of the League leaders who are so closely identified with the late successful convention.

Bishop Ninde is the officer to whom is specially committed the oversight of the League in the Methodist Episcopal Church of the United States. The Bishop bears as one of his names, Xavier, we presume from the famous missionary who in the 16th century carried the Gospel to India and won thousands of converts from heathenism in that land.

Bishop William Xavier Ninde, D.D., LL.D., was born June 21st, 1832, in Cordlandville, N.Y., consequently he is now in his sixty-fifth year. He graduated from Wesleyan University in 1855, where his scholarship was of high rank. After graduation he taught a year, and then joined the Black River Conference, and served several churches with increasing acceptability. In 1861 he was transferred to the Cincinnati Conference, and for some eight years was successively pastor of some of the principal churches in that city. He spent a year or two travelling

in Europe and the East. On his return, in 1870, he was transferred to the Detroit Conference, and stationed at the Central Church in Detroit. At the close of this pastorate he was elected to the chair of practical theology in Garrett Biblical Institute of Evanston, Ill., of which institution he became president in 1879. He was elected bishop in 1884, and is now president of the Epworth League in the Methodist Episcopal Church.

Our own Dr. Carman, General Superintendent of the Methodist Church, has from the very beginning been one of the most devoted friends of the League. We all know with what enthusiasm he has thrown himself into the forefront of aggressive League work, how faithfully he has been present at its conventions, and with what ever youthful zeal and energy he has promoted its interests.

Dr. Carman was born in the township of Matilda, Ontario, June 27th, 1833, and is therefore now sixty-four years of age. He was educated at the Dundas County Grammar School, and at Victoria University. For some years he was President of Albert College, and afterwards Bishop of the M. E. Church



REV. A. C. CREWS.

previous to the union. Dr. Carman is a most eloquent speaker who never fails to

arouse enthusiasm, and as an executive officer he has no superior.

The zealous and indefatigable League Secretary of our own Church, the Rev. A. C. Crews, lives in the affections of every loyal Leaguer. Under his adminis-

tration the League has become better organized, better equipped, more homogeneous in character and united in spirit than ever before. Upon no man has the burden of the late Convention so greatly weighed as upon him, and to no man is it more indebted for its success.

---

## Current Topics.

---

### THE SOCIAL ASPECTS OF METHODISM.

Methodism is a social as well as a religious force. It owes much of its influence to the facilities it offers for the development of the social instincts of our nature. Those instincts are an essential part of our constitution, and their due development is necessary for the perfect symmetry of character. Not cloistered recluses nor the inmates of monastic cells are the true ideals of religious life; but a Christian brotherhood, dwelling together in mutual helpfulness and sympathy. "As iron sharpeneth iron, so doth the countenance of a man his friend;" and in nothing more than in religious intercourse.

For such intercourse Methodism makes especial provision. Not merely in the great congregation do her worshippers meet, but in the more social and private means of grace—the love-feast, the class-meeting, the prayer-meeting, the revival service, and the various meetings for the promotion of religious or philanthropic objects. Especially is the class-meeting a bond of unity and source of strength to the Church. Apart from its directly spiritual results the frequent and regular and intimate intercourse which it fosters creates a feeling of Christian brotherhood to which we find nothing comparable elsewhere except in the hallowed fellowship of the primitive believers, where the rich and the poor met together, and felt that the Lord was the maker of them all—that they were all one in Christ. God sets men in families like a flock, and this sort of Christian family-life develops some of the noblest traits of Christian character.

But there are those attending the ministrations of our churches, who, to their own loss, do not avail themselves of these social means of grace as they should. In large city churches, where there are a great many members, we can conceive that some additional opportunities of meeting together in social intercourse, for the cultivation of mutual acquaintance

and friendly sympathy, would be highly desirable. Provision for meeting this want has been made in some of our churches. The Sunday-school room is itself a very beautiful apartment with high ceiling, frescoed walls hung with beautiful pictures, with comfortable seats. Connected with this by folding doors is a large church parlour, carpeted, and containing a piano or cabinet organ and tasteful furniture.

Here are held the frequent social gatherings of the church—not formal meetings where three or four persons do all the talking in set speeches, but where the people do their own speech-making, and enjoy it much better than when others do it for them; and where new comers may be introduced to this church-family life. Those who are musically inclined gather around the piano, those who are fond of books and pictures around the church library and stereoscope tables, the matrons discuss family matters together, the young folks improve the opportunity of becoming acquainted, the pastor saunters from group to group, promoting good fellowship and Christian intercourse, and devotional exercises always give a hallowing influence to the occasion.

Now it can easily be conceived that, under proper safeguards, some such arrangement as this might be of great religious as well as social benefit. In city churches persons may sit in neighbouring pews for years with only a very slight acquaintance, unless they meet in the same class. Such a gathering would facilitate their becoming acquainted. Our young people will seek social enjoyment, and better that they should seek it under Church auspices than under the frequently unhallowed and soul-destroying auspices of the world. Religious influences would be thrown around even their hours of relaxation, and would tend to leaven their character and mould their conduct. The church would become in a



manner a religious home, and would possess, even for the religiously indifferent, attractions that might woo them to its spiritual ministrations. Social cliques in the Church would be less likely to be formed, and its poorer members would feel more at home in these common gatherings than in the dwellings of the rich, and would here enjoy social and aesthetic pleasures for which they may possess a keen relish, but from which they might otherwise be cut off.

THE PAX HIBERNICA.

It would be a happy commemoration of the Queen's Jubilee if Mr. Balfour's new measure for local self-government received the cordial support of the Irish leaders. This seems to be a revival of Mr. Chamberlain's scheme of four Local Councils to represent the provinces, or ancient kingdoms of Ireland. We are so used to local self-government in Canada that it seems to us the inalienable right of every part of the empire. Of course, the Imperial authority must be supreme and have the right of sanction and veto. But with enlightened statesmanship there need be little need for friction in this regard. With a liberalized land law, a readjustment and equalization of taxation, the generous sympathies of the Irish nation would make her the enthusiastic ally and friend of Great Britain. The little island has given many of the ablest statesmen, administrators, soldiers, authors, and scholars to the empire. Its greatest enemies have been the professional agitators who have lived upon stirring up strife between the two peoples.

A COMMON CITIZENSHIP OF THE ENGLISH RACE.

More and more this magnificent idea is coming within the range of possibility. The latest contribution thereto is the striking article under this title in the *Contemporary Review*, by Prof. Dicey, the head of the department of law in All Souls College, Oxford, England. He deprecates the idea of political unity, but proposes that "England and the United States should concurrently make all citizens of one nation, during the continuance of peace between the two countries, citizens also of the other," and urges his conviction that "the time is opportune for aiming at the extension of common civil and political rights throughout the whole of the English-speaking peoples."

He admits and expounds the Monroe

Doctrine as follows: "The doctrine means, in the second place, that the predominance of the United States throughout the American continent must be admitted by foreign Powers in much the same way in which all countries recognize the predominance of British authority throughout India. But, further, if England and the United States were at one, the Monroe Doctrine, which would avail for the protection of Canada against any European enemy of Great Britain, might be maintained as zealously by the Queen as by the President. The interests of England and America, in short, in the main coincide; a common citizenship, if it tended to a permanent alliance, would be beneficial to both."

A writer in the *Central Christian Advocate* says: "He shows that England and the United States agree in the conviction that government is maintained upon the idea of individual freedom and not by the continental policy of militarism; and in the principle that the civil law is above the army; and that there is a great body of legal conceptions which, cherished wherever English is spoken, establishes the 'essential unity of the whole English-speaking race, for its broad and generous humanitarian tone and its philosophical acumen will command the attention of all who are interested in statecraft and good government.'"

METHODIST UNION IN AUSTRALIA.

We quote the following figures and comments from the *Montreal Star*:

Australasia appears to have learned the lesson of unity from Canada. Not only is political union in the air, but the four Methodist bodies of the island continent are now nearing the consummation of a union like to that which the Methodists of Canada accomplished in 1883. They are now voting on the project. In New South Wales and Queensland members and adherents are permitted to vote; in South Australia and West Australia the vote is confined to members of all ages; in Victoria and Tasmania the votes of members above the age of twenty-one years are alone being taken. A recent English paper contains the result of the voting in the last two colonies:

	For.	Against.
Wesleyan .....	9,996	2,472
Primitive Methodist ...	2,769	256
Bible Christian .....	2,034	72
United Methodist Free Church.....	1,160	88
Total.....	15,959	2,688

## THE DISCOVERER OF CHLOROFORM.\*

The modern successor to the old knight-errant, "who rode abroad redressing human wrong," is the faithful physician whose life is a long crusade against sickness and suffering, and whose victories of peace are more glorious than those of war. Ian Maclaren has glorified the profession in the person of Dr. Weelum Maclure, who is but a type of a host of self-sacrificing men, very many of whom become victims to their devotion to suffering humanity.

All the world a few months since celebrated the jubilee of the discovery, by Dr. Morton, of Boston, of anesthesia by the use of ether. On his monument is an effigy of the Good Samaritan succouring the Jew, and the legend, "There shall be no more pain." In the year 1837 Dr. Simpson discovered a still more successful anesthetic, chloroform. It was no chance discovery, but one obtained through long search. He nearly poisoned himself and some professional friends by his experiments—working night after night after a hard day's work, sometimes till three o'clock in the morning. Professor Miller, a neighbour, used to call every morning to see if the experimenters had survived. There was difficulty in getting enough of the drug; but now, in one factory, three-quarters of a million doses are made weekly.

The conservatism of the profession at first refused to employ the new anodyne, and bigotry protested against it as undermining religion and fighting against the divine law of suffering. Dr. Simpson quoted, in retort, James iv. 17, "To him that knoweth to do good and doeth it not, to him it is sin."

This boon to humanity soon won its way. The first child born under its use was christened Anesthesia, to commemorate the fact, as the first child that was vaccinated in Russia was named Vaccinoff.

As a student Dr. Simpson was so sickened at the agonies of the operating theatre

\* "Sir James Y. Simpson." By Eve Blantyre Simpson. Famous Scots series. Edinburgh: Oliphant, Anderson & Ferrier. Toronto: William Briggs. Price, 50 cents.

that he half determined to abandon the study of medicine; but, like a true soldier, he stuck to his post, till he relieved the world of an inconceivable burden of pain. The old surgery, with the horrors of cautery, the glowing and hissing irons and agonies of the patient, was a nightmare of suffering. Dr. George Wilson, a brother of our Sir Daniel, describes his own sufferings under the surgeon's knife as "a horror of great darkness, the sense of desertion by God and man, bordering close upon despair, which swept through his mind and overwhelmed his heart."

Good as he found chloroform, Professor Simpson often risked his life to discover a still better means to banish pain.

"He'll kill himsel' yet wi' thae experiments, an' he's a big fule, for they'll never find onything better than chlory," said his servant, Clarke, trying to restore him to animation.

But Clarke, attempting a similar experiment, not on himself, but on the cook, came flying upstairs, crying, "Come doon, come doon, doctor! I've pushioned the cook, deid."

Prof. Simpson's noblest attribute was his simple piety. "I have unshaken confidence in Jesus only," he said. He knew his Bible from cover to cover. The words, "God is love," were inscribed on a watch a patient gave him. "Your selected text," he wrote, "will, I trust, enable me to speak words of strength whenever I stand by the bedside of a dying patient—strength to her in her weakness, and words of life to her in the hour of her bodily death."

"What do you consider was the greatest discovery you ever made?" an interviewer asked him. "That I have a Saviour," replied the Professor, without hesitation.

His worldly honours he held light as air. "I felt this baronetcy such a bauble in health," he wrote, "and now, when sick and heartsore, what a bauble it is!" On his death-bed his wife read simple tales of Scottish piety, and repeated his favourite hymn, "In Immanuel's land." On his tombstone are the words, "Nevertheless I live," with above it a psyche, bursting from its chrysalis, the emblem of immortality.

Who loves not knowledge? Who shall rail  
Against her beauty? May she mix

With men and prosper! Who shall fix  
Her pillars? Let her work prevail.

—Tennyson.

## Book Notices.

*Relics of Primæval Life.* By SIR J. WILLIAM DAWSON, K.C.M.G., LL.D., F.R.S. With sixty-five illustrations. London: Hodder & Stoughton. Toronto: William Briggs.

The people of Great Britain are apt to think and speak of Canada as the New World. Sir William Dawson here shows that Canada is really the Old World, the first land surface of the earth to be heaved above the bosom of the seething deep. Moreover, he proves that the first inhabitant of this planet was a Canadian. He has discovered, identified, and named him—"Eozoon Canadense,"—the early-born Canadian.

This discovery of the traces of life in what were long supposed to be the Azoic rocks of Canada created a good deal of discussion; but the animal origin of these early relics is very strongly maintained. No one can examine the beautiful specimens in the Canadian Museum at Ottawa, without being pretty thoroughly convinced of this fact. It is only by a somewhat wild poetic license that Eozoon has been represented as "an enormous composite animal stretching from the shores of Labrador to Lake Superior and thence northward and southward to an unknown distance, forming masses 1,500 feet in depth." Eozoon, it is shown, like the coral insect, has been an organic builder of reefs and ledges which form the foundations of a continent.

Sir William maintains that the discovery of the Eozoon brings the rocks of the Laurentian system into more full harmony with the other geological systems. This primordial creature receives still greater importance in the discussion of the wide question of the origin of life. Sir William puts the Eozoon into the witness-box and elicits its testimony as to the beginnings of life, and presents its testimony as follows:

"I, Eozoon Canadense, being a creature of low organization and intelligence, and of practical turn, am no theorist, but have a lively appreciation of such facts as I am able to perceive. I found myself growing upon the sea-bottom, and know not whence I came. I grew and flourished for ages, and found no let or hindrance to my expansion, and abundance of food was always floated to me without my having to go in search of it. At length a change came. Certain creatures with hard snouts and jaws

began to prey on me. Whence they came I know not; I cannot think that they came from the germs which I had dispersed so abundantly throughout the ocean. Unfortunately, just at the same time lime became a little less abundant in the waters, perhaps because of the great demands I myself had made, and thus it was not so easy as before to produce a thick supplemental skeleton for defence. So I had to give way. I have done my best to avoid extinction; but it is clear that I must at length be overcome, and must either disappear or subside into a humbler condition, and that other creatures better provided for the new conditions of the world must take my place."

The book is written throughout in Sir William's lucid and luminous manner, is well printed and illustrated, and contains a valuable appendix, in which some of the difficulties of evolution are discussed.

*Transactions of the Astronomical and Physical Society of Toronto for the Year 1896, including Seventh Annual Report.* Price, \$1.00. Toronto: Rowsell & Hutchinson.

It is gratifying to know that we have in Toronto, in addition to the well-known Canadian Institute, an active scientific society, which has just issued its seventh annual report. It embraces a number of gentlemen and ladies who are interested in scientific pursuits. Its purpose is not merely to play science, but to cultivate the scientific spirit, to keep abreast of the latest scientific discoveries, and, if possible, to push the frontiers of science still further into the unknown.

We endeavour in the pages of this magazine to popularize the study of science by maintaining a special department on its recent progress, and giving in each number, as far as possible, an up-to-date scientific article. Much more might be done in this regard if facilities were furnished for visiting, for instance, our Provincial Observatory and studying the instruments for astronomical and physical research and for giving the uninitiated an occasional peep through its telescopes. In Lick Observatory, Mount Hamilton, and elsewhere, one night in the week is devoted to this education of the people. In Vienna there is a most interesting and instructive exhibition named Urania, where, for a nominal fee, one may use a fine telescope and have

explained some of the most recent and ingenious scientific apparatus. Popular lectures are also given, and the place is exceedingly well patronized. The book under review owes, we judge, much of its completeness to the labours of the assistant secretary and editor, Mr. Thomas Lindsay, an accomplished contributor to this magazine. The annual address of the president, Mr. John A. Patterson, M.A., is exceedingly interesting.

*The Lion and the Lilies. A Tale of the Conquest, and Other Poems.* By CHARLES EDWIN JAKEWAY. Methodist Book-Rooms, Toronto, Montreal & Halifax.

The tale which gives its title to this book is, we think, the most considerable in size, interesting in matter, and rich in poetic spirit and diction, that has yet appeared in this young country. It is an addition of no small value to its poetic literature.

This is a tale of romance and adventure in the stirring times of the conquest. The French, the English, and the Indian races play their part therein, and the conflict of the lilyed flag of France and the lion standard of England for supremacy on the frontier and at the fortress height of Quebec, gives historic interest and value to the poem. The very opening lines give an indication of the author's poetic diction :

Lake George for liquid miles lay stretched  
away,  
Red-litten by the gleams of rising day,  
The fog-veil on its misty brim afar  
With crimson curtained the horizon's bar,  
And fluttered o'er the lake's fair cinctured  
green  
In fleecy clowdlets soft and opaline,  
Above which soared in majesty benign  
The lofty-plumaged, skyward-pointing pine,  
And piercing through in quaint fantastic  
shapes  
Wererocky headlands and broad, bushy capes.

The narrative poem is varied by lilted lyric song which brighten and enrich its tissue like golden embroidery on a velvet robe. The shorter poems are nearly all of a patriotic character. Some of them illustrate the heroism of the Jesuit missionaries 250 years ago in the Huron region. Others commemorate incidents in the war of 1812, the capture of Detroit, the fall of Tecumseh, the death of Brock, and the heroic story of Laura Secord. Nor is the element of pathos wanting in some of the domestic narratives. It is specially fitting that in this Jubilee year such a noble volume of Canadian verse should be presented.

*The Old World and the New Faith.* By W. FIDIAN MOULTON, M.A. London: Charles H. Kelly. Toronto: William Briggs. Montreal: C. W. Coates. Halifax: S. F. Huestis. Pp. 228.

This is a new study of the Book of Acts. The preface distinctly states that it is in no wise intended to augment the already large catalogue of commentaries on the Acts, nor does it pretend to give any systematic account of Apostolic doctrine—The writer's point of view is defined in the title: "Notes Upon the Historical Narrative"—In the introduction we have a brief survey of the state of the world at the coming of Christ, and a discussion of the authorship, date and scope of the book, together with an outline of the career of its hero. The author permits himself to offer an opinion concerning Paul's "stake in the flesh," which differs from the popular view. The doctrine of the Tübingen school in reference to the "tendency" theory is rejected.

Following the introduction we have a review of the Church in Jerusalem, the Ministry of Stephen and Philip, and the Mission to the World, the remainder of the volume being devoted to a consideration of the Pauline voyages. The author's name guarantees the scholarship and soundness of this new contribution to so important a part of New Testament literature. A capital map, excellent analyses of the contents of each section, and a series of admirable questions, intended to test the thoroughness of the reader's study of the subject, make Mr. Moulton's book a valuable hand-book for students of the history of the primitive Church as outlined by St. Luke. S. P. R.

*Browning's Verse-Form: Its Organic Character.* By ARTHUR BEATTY, A.B., Columbia University, New York.

This is a masterly analysis and criticism of the lyric and dramatic poetry, especially the verse-form, of Browning. It evidences microscopic study of that great writer. It is exceedingly instructive to note what may be called the mechanical elements of his verse, the alliterations, assonances, and cesuras. It must not, however, be supposed that the author was consciously aware of their employment. A great poem is not built up in that mosaic style. It gushes like water from a spring, or, perhaps, more often in Browning's case, like lightning from a cloud—the impetuous utterance of a strong soul with a "burden" which he *must* wreak upon expression.

## Religious and Missionary Intelligence.

BY THE REV. E. BARRASS, D.D.

### WESLEYAN METHODIST.

Rev. Drs. Rigg, Moulton, Stephenson, and Waller, with Rev. Messrs. Kelly, Hughes, Green, and Mr. Hartley, had reserved seats assigned them at the grand Jubilee service in St. Paul's.

True to its missionary spirit, Rev. J. G. Davis has been sent to Nigel Gold Fields, Transvaal; and Rev. H. Oswald Brigg to Mashonaland.

At the late examination of candidates for the ministry ninety young men had been recommended by their respective district meetings; fourteen declined the ordeal. There is such an abundant supply of ministerial candidates, that all who finished their collegiate course in 1896 were not needed until the year was far advanced. It is not now as it once was, that the harvest is plenteous and the labourers are few.

A novel church dedication took place recently at Mount White, a mission in South Africa, where cattle, horses, sheep, and goats, valued at \$142, were contributed, in addition to \$372 in cash. Chief Makaula was so captivated with what came under his notice that he instructed his son to see that a church was erected at Lubateni, where his remains may some day be interred.

Rev. F. Langham, who has been a missionary in Fiji nearly forty years, and has become very familiar with the language, has been employed by the British and Foreign Bible Society to revise the Fijian Bible. He will thus be employed at least two years.

The year 1896-97 has been, indeed, a year of grace in British Methodism. We believe that every branch of that great family has a substantial increase in the Wesleyan body. The returns just completed show an increase of 3,520 full members, with 632 on trial, and an increase of 1,520 juniors. There is now a total membership of 438,940 and 73,400 juniors in Great Britain: Adding to these 44,360 members on foreign mission stations, and 41,721 on trial for church membership at home and abroad, we have a grand total of 598,421 members under the direct control of the British Conference. Great as has been the in-

crease at home, that on the mission field has been still more marked.

The Education Act, which has just passed in the British Parliament, while it may to some extent benefit Wesleyan and other Nonconformist schools, will much more greatly strengthen those of the Church of England and Roman Catholic Church. R. W. Perks, Esq., M.P., a distinguished Wesleyan layman, enunciates the bold policy "for the protection of their children and in the highest interests of the country, that the Nonconformists should forthwith make an heroic effort to build at least one thousand day-schools in the villages and towns where their children are now driven into Anglican and Roman Catholic schools. The ten leading evangelical Nonconformist churches in England and Wales have to-day more communicants, more Sunday-school teachers, more scholars and upwards of one million more sittings in their places of worship than the Church of England with all her endowments and social advantages."

It is cause for congratulation that in educational as well as in municipal institutions "this Canada of ours" is so much in advance of the mother country. The heroic efforts of Dr. Ryerson to secure the proper recognition of the Methodist people in this land give us a vantage-ground which our kinsfolk in England would be very glad to possess.

### THE METHODIST CHURCH.

The Annual Conferences were held during the month of June. We give them in the order in which they were held.

British Columbia—Rev. T. Crosby, President, and Rev. J. P. Howell, re-elected Secretary; Montreal—Rev. Dr. Saunders, President, and Rev. W. Sparling, Secretary; Bay of Quinte—Rev. Dr. McDiarmid, President, and Rev. J. Macfarlane, Secretary; Hamilton—Rev. R. W. Woodsworth, President, and Rev. J. W. Cooley, Secretary; London—Rev. S. Bond, President, and Rev. Geo. F. Salton, Secretary; Toronto—Rev. Dr. Stone, President, and Rev. Dr. Campbell, Secretary.

The ordination sermons were preached—at Vancouver by the Rev. Dr. Carman, General Superintendent. At Ottawa by Rev. A. C. Courtice, M.A., B.D. At Bowmanville (Bay of Quinte), by Rev. T. M. Campbell, retiring president. At Brantford, by Rev. Dr. Potts, in the church where he was ordained thirty-six years ago, in company of Dr. Langford, ex-president of Toronto Conference. At London, by Rev. Geo. Jackson, the retiring president.

All the Conferences reported an increase of members. Montreal is the smallest, but this is no marvel, seeing that for four years many parts of the Conference have been subjected to a most unhappy religious agitation which rent several societies to pieces, but this state of things is now over and some who withdrew from the Conference have returned to their first love. Here are the increases in detail: Toronto, 1,565; Montreal, 80; Bay of Quinte, 485; Hamilton, 473; London, 1,358; British Columbia, 164; Manitoba, 522. Total, 4,657.

This is indeed a gratifying report. It is also stated that 1,803 Sunday-school scholars in Hamilton Conference have joined the Church during the past year.

It is a matter of great regret that there is almost a general deficiency in the contributions to the Connexional funds. The Missionary Fund, we fear, reports the greatest deficiency. This is a most serious aspect of affairs, seeing that not only can there be no extension of the work, but the brethren on domestic missions will be the greatest sufferers.

Candidates for the ministry are more numerous than can be accepted. Some Conferences refused to receive any, and Montreal, which reported twelve applications, would only admit six. Toronto received even less. To act otherwise than the Conferences have done would have seriously burdened the funds, and rendered premature superannuations a necessity. These venerable men, some of whom would still be glad to serve the Church on small stations, do not receive the small amount to which they are entitled, owing to the deficiency in the fund. Happily the Book-Room, at its late annual meeting, set aside \$9,000 from the profits for the Superannuation Fund, or matters would have been worse than they are.

All the Conferences spoke out most earnestly on the prohibition of the liquor traffic, and insisted that the

Premier of the Dominion Legislature should fulfil his promise made prior to the election respecting the Plebiscite without any reference to direct or any other taxation, to make up the supposed loss of revenue if the question should carry.

Earl Aberdeen visited the Montreal Conference at Ottawa, and delivered a very kind address, in which he spoke with terms of great commendation of the Methodist Church, whose praiseworthy labours he had had the pleasure to witness in various parts of the Dominion. The Conference listened to his Excellency with great pleasure, and sang one verse of "God Save the Queen."

A correspondent supplies the following interesting information respecting British Columbia Conference: On the last day the Marquis Ito, Ambassador from Japan, passed through the city on his way to England for the Jubilee. He contributed \$100 towards a church for the Japanese of the city.

Ten years have passed since Toronto Conference met last in Carlton Street church, but during that period, though there has been an increase in the membership of more than 8,000, nearly fifty ministers, most of whom were present at the said Conference, have since then died. Here are a few of their names: Revs. Dr. Wood, Dr. Rose, Dr. Shaw, Dr. D. G. Sutherland, K. Creighton, T. W. Jeffery, J. W. McCallum, Dr. Pirritte, Dr. Stafford, Dr. Boyle. God buries His workmen but carries on His work. The ranks of the departed have all been filled, and others are waiting for the call of the Church that they may enter. There is a surplus of ministers, and more candidates for the sacred office than can be employed.

Rev. J. A. Jackson, S.T.L., M.D., who was ordained at Toronto Conference, accepted an appointment at Bella Bella to labour among the Indians there. A farewell meeting was held in Broadway Tabernacle, June 21st. He will be supported by the Epworth Leagues of the Central District. The Doctor was warmly greeted at the meeting and his young friends gave him tangible proofs of their affection.

#### JAPAN CONFERENCE.

A letter has been received, as we go to press, from Rev. Dr. Scott respecting the Conference just held. He says: "It was a time of unusual interest. The

Japanese ministers expressed themselves delighted with the harmony, spirituality and helpfulness which characterized the sessions. The ordination sermon was preached by Rev. Dr. Honda, president of the Toyama College of the Methodist Episcopal Church, and was brimful of Gospel truth. The Rev. Dr. Macdonald was unanimously chosen President of the Conference. Two young men were received as probationers for the ministry, and one was received from the Presbyterian Church. At this Conference a forward step was taken by founding, in the northern island of Yezo, the first mission of the native Church. The native missionary society assumes the financial responsibility. The reports show 324 baptisms for the past year; an increase of 112 in the membership; of 100 in the Sunday-school, and of 1,237 yen in the givings of the people for all purposes.

The net increase in the membership in the Western Conferences, including Japan, is 4,789.

#### PRIMITIVE METHODIST.

The May meetings have been numerously attended. The Missionary Anniversary reported an income of nearly \$36,000. The missions are established in several parts of England, Ireland and Scotland, and Africa. In the latter many hardships have been endured and some lives have been sacrificed, but there are more volunteers for the most difficult fields than can be sent out. The meeting in Spurgeon's Tabernacle was one of the most successful ever held in that time-honoured sanctuary.

The Woman's Missionary Society Anniversary reported great progress. Several ladies were the speakers, some of whom, as missionaries' wives, knew well what was meant by going into the foreign field. Mrs. Buckenham, whose husband died on the journey home, was introduced and most cordially welcomed. The proceeds of the meeting amounted to \$580.

One hundred and thirty-four necessitous local preachers have been assisted during the year from the fund established for their benefit.

Appearances indicate that the union between the Primitive Methodist and Bible Christian Churches will be effected in the near future. A basis of union has been agreed upon, which, after being accepted by the respective Conferences, will be submitted to the Quarterly Meetings for their approval.

#### METHODIST NEW CONNEXION.

The Centenary services, which were held in Wesley's Chapel, City Road, London, were of more than ordinary interest. Rev. Dr. Parker preached. The sermon, as might be expected, was one of great power and well suited to the occasion.

At the public meeting addresses were delivered by ministers of all branches of Methodism. W. P. Hartley, Esq., the well-known Primitive Methodist layman, presided. Rev. F. W. Bourne stated that when Wesley's Chapel was built there were only 44,000 Methodists in the world, but when the second Ecumenical Conference was held the number had increased to 150 times that number.

The President of the Wesleyan Conference, Rev. Dr. Randles, described the New Connexion as a child of the parent body, and like all parents the Wesleys were glad of the prosperity of their offspring. Messrs. R. W. Perks, M.P., and Mr. Percy Bunting, were equally congratulatory.

Chief Justice Way, from South Australia, told how the Connexion had flourished in that colony, and thought that the present gathering was carrying out Mr. Wesley's advice: "Take care to let all the world know that Methodists in every part of the world are one, and are determined so to continue.

It is confidently expected that the Centenary Fund will amount to \$500,000 by Conference.

The increase of members for the Centenary year is 1,000.

A recent appeal was made for a young man to be sent to China, when three suitable persons responded, from whom the choice will be made by the Missionary Committee.

#### BIBLE CHRISTIAN.

A missionary from Australia, Rev. W. Ready, is visiting England. He has had a successful career in the Southern world, and will be a valuable member at the Conference. It is expected that he will spend at least six months at home, and will visit many places in the Connexion. Right Hon. Justice Way will also be in attendance, and according to the plan he will preside at the Conference Missionary Meeting. His father was the first missionary sent to Australia, and the right honourable gentleman has risen to eminence by his own industry and perseverance. He resided at Exeter, the

Conference town, when a boy eight or nine years of age.

Bazaars are still very numerous held in England. One was recently held at Plymouth, and at the four days' sale the receipts were \$2,215. On the day of the opening the Rev and Mrs. Dymond landed from China, and their hearty welcome was one of the chief incidents of the day.

#### METHODIST EPISCOPAL.

Bishop Hurst's son, Carl Baily, has been appointed consul at Vienna, Austria.

Dr. Crook's "Life of Bishop Simpson" has been translated into Japanese, and will be published as soon as the means are forthcoming to defray the expense.

On May 23rd the twenty-fifth anniversary of Bishop Andrews' election to the Board of Bishops was celebrated. The Bishop quoted some remarkable figures showing the progress of the Methodist Episcopal Church during the past quarter of a century. In 1872, there were about 9,000 effective ministers, now there are more than 14,000. In 1872 there were about 1,400,000 church members and probationers, now there are 2,800,000. The number of churches has increased from 13,000 to 26,000. The Bishop was made the recipient of \$2,500.

Bishop Merrill, at Chicago, was presented with a magnificent silver cup in remembrance of the twenty-five years he has served the Church as a bishop.

The Church Extension and Missionary Society Anniversary was lately held in the Metropolitan church, New York, from which we gather the following facts. The income for the year was \$39,542. The General Missionary Society made a grant of \$6,000 for work among foreigners; the offerings from the people amounted to \$30,000; there are twenty-one churches and missions under the care of the Board. The Society holds property worth \$650,000, included in which are fourteen churches and a plot on which a church is soon to be erected. The progress in thirty-seven years has been great.

Rev. Dr. Nast, the founder of German Methodism, is ninety years old.

#### RECENT DEATHS.

Rev. George Turner, Wesleyan minister, died May 16th, 1897. He was a

native of Yorkshire and was born in 1816. In early life he became a subject of saving grace, and soon afterwards was called by the Church to labour as a local preacher. In 1840 he entered the itinerancy, and for forty years he laboured successfully in several important circuits and gave full proof of his ministry. His colleagues esteemed him, and the people ever regarded him, as a man of God. He was especially kind to the poor. Besides being a useful minister, he was also an author who wielded a ready pen. He retired from the active duties of the ministry about seventeen years ago, but was esteemed to the last as a saint indeed.

Dr. F. L. Lees, who for more than half a century was one of the temperance champions of England, recently died at Leeds. His works are standards in temperance literature throughout the world. He was more than eighty years of age when the Master called him hence.

Rev. Dr. McKee, of Dublin, Ireland, was called to his reward at the age of seventy-three. He was one of the leaders in Irish Methodism, and was not only distinguished for pulpit ability, but, was a man of affairs, more particularly in educational affairs.

Rev. James Greener, Bay of Quinte Conference, who commenced his ministry in 1843, died at Lindsay during the past month. For more than twenty years he was a superannuate, being compelled to retire by reason of failing eyesight. During the time that he was in "the active work," he was faithful in all matters pertaining to his circuits. He was a thorough Connexional man, and was generally esteemed by those who knew him best. It was the writer's privilege to know him intimately, and always found him to be a true man. We never knew him to be guilty of doing a "shabby thing."

Rev. John Hodgson died in the Lord as these notes were being prepared for the press. He entered the ministry in 1850, and for several years performed hard work on rough circuits. For some time before the end came he lived mostly in retirement and suffered much affliction, but he has now entered into rest.

Hope, like the gleaming taper's light,  
Adorns and cheers our way ;

And still, as darker grows the night,  
Emits a brighter ray.

—Goldsmith.