

BOYS AND GIRLS

The Day With God.

(The Rev. Isaac Ogden Rankin, in the 'C. E. World'.)

The morning, Lord, be Thine, as Thine
Were the still hours of sleep.
About this wandering life of mine
Thy guardian vigils keep.
Though pride and folly lurk within,
And passion lures me still,
Let no enticing thought of sin
Pass by my gates of will.

O patient love, that suffers long,
My pattern and my joy,
Restrain me in the hour of wrong,
The moment of annoy.
From folly let my lips be free,
From feverish hate my heart.
Thou pardonest, Lord, and I would fain
Choose the forgiving part.

No dearer name than Thine be heard,
No dearer will be known—
Who are the true and living Word,
Who lovest still Thine own.
Wherever duty leads my feet,
Whate'er my sorrows be,
Let all the cares of life be sweet
Because I work with Thee.

Rasmus, or the Making of a Man.

(By Julia McNair Wright.)

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CHAPTER VIII.

Lessons in Leaves.

'And thus among the rocks he lived
Through summer heat and winter snow,
The eagle was the lord above,
And Rob was lord below.'

'I don't think I should like to be a farmer,'
said Rodney, looking at a man who went up
and down, sowing a great field. 'It must be
tedious and stupid to do such work as that.'

'But it comes to something,' said Rasmus.
'If I had to work, I'd take to something about
a farm. All we get comes out of the ground,
if you be back enough.'

'What is the most important thing to us
that grows out of the earth?' asked Rodney.

'Why, grain, you silly!' said Rasmus.

'You're out, there,' replied Mr. Llewellyn.

'What do you think it is? Apples, pun-
kins, cabbage?'

'None of those things would do us any good
if we were not alive to use them; and and
none could keep life in us without the help of
another thing that grows. Look across that
woodland. What gives it that fine, purplish
green color?'

'The young leaves just burstin' out,' said
Rasmus; 'young leaves isn't all of a color.
The beech is purple in the young leaf, and the
oak is yellow and pink, or a kind of pink and
brassy color, and the maples begin red, and
some kinds are yellow, and some silver.'

'And then they speedily turn green. That
green is a substance laid in little cells, some-
thing like the cells in a honeycomb. It is
called chlorophyl—I'll call it "leaf-green";
and if it were not for that, we'd all be dead in
short order.'

'Why, we don't eat it, or drink it,' said
Rasmus. 'I have heard of hungry people eat-
ing young oak leaves, but they got mighty
little good by it.'

'I'll explain to you,' said Mr. Llewellyn.
'There is, in all the bodies of men and ani-
mals, a little waste or decay going on, all the
time; little particles only to be seen through
a microscope—atoms called carbon—are
brought into our lungs here, where we breathe.
If they remained there, we should die. Fill
your lungs with this good air: that is oxygen:
it goes into the lungs, and at once the little
had carbon atoms seize it and mix with it.
Every two atoms of the clean oxygen get one

atom of the dirty carbon; and when we
breathe out, after having breathed in, we
send out of our bodies this carbon, mixed with
oxygen. But it is now not good air: this mix-
ing has made it poison. It is called carbonic
acid gas, and it is supposed that from the
lungs of men and other animals forty-five
million tons are thrown into the atmosphere
every day. As it is a poison we'd die of it,
at that rate, very soon, if it were not for the
green leaves. Now, the leaves live and grow
on this very carbonic acid that kills men. Look
at this leaf under my microscope; it is full
of little holes or mouths, especially on the
under side. In sunshine they are widest open
swallowing all the carbonic acid they can get;
but the plant does not want all the carbonic
acid, it only wants out of it that little one
part of carbon; so it eats that up, and
breathes out the two parts of clean oxygen
again, so the bad part of the air is eaten up
by the plant, and the good part is sent out
clean for animals to breathe, and the atom of
carbon is turned by the plant—working like
a little factory—into sugar, or starch, or
wood; and thus made over, we eat it in grain
and potatoes, or burn it in our stoves, or build
our houses of it. And so, you see, the plant
uses and changes what is the waste of our
systems, and would poison us.'

'Is that breathing out of what you call car-
bon stuff, what makes the air so bad when a
lot of people are crowded together without
doors or windows open?' asked Rasmus.

'Exactly that; it causes disease, and some-
times death.'

'I've seen it in the two and five cent lodg-
ings. I'd rather stay out in any storm than
in one of them. My head feels as if it was
full of blood, and my stomach turns sick, and
my ears ring. It's awful! You see, they
crowd them places as full as they can hold,
for people to lie right along, and some of
them goes in sick, or drunk, or dead tired, and
drops asleep directly; and in the morning
they feel nigh dead. They have headache, and
are dizzy, and stiff, so if they can raise a
nickle, they run right off for a dram. There
wouldn't be nigh so much early drunks, if the
police didn't allow them lodging-houses,
packed like herring boxes, or if people would
see to it that the miserable people had decent
lodgings, with separate beds, and some air in
the room. Some of them lodgings the poor
folks have nowhere else to go in the morning,
and they feel weak and tired, and worse than
when they come in, and the keepers can't get
'em woke up, and cleared out. I've knowed
where the beds was sacking, string or rope,
and in the morning they untied the rope, and
let 'em down, and that woke 'em up. I don't
want you to think I slept in such dens. I've
got some respect for myself. But if there was
half-way clean lodgings, lodgings as decent as
a pretty good pig-pen, or chicken-house, or
car-stable for poor folks, and a cheap place
where they could get hot breakfast, I say
there wouldn't be half so much drunken folks.
They is drove to drunkenness, many of
them. I've lived among them, and the beauty
of me is, when I talks, I knows what I'm talk-
ing about.'

'That is very wonderful about the leaves
and the animals,' said Rodney, coming out of
a reverie. While Rasmus had been giving
himself to the practical issues of the matter,
Rodney had been devoting his attention to the
theoretical.

'It shows, as all nature does, when studied,
plan. The more we learn about nature, the
more we see the Divine mind and wisdom ly-
ing back of it. It is no mere accident that
every plant thrives on what the system of
man rejects, and by an interchange of good of-
fices the animal feeds the vegetable world,
and the vegetable the animal, while the poison
absorbed by the leaf, is in its wonderful al-
chemy converted into proper food, or fuel, or
clothing-fibre for man.'

'Then all the plants are thinking about or
working for, is to take care of man?' said
Rodney.

'No; what they are all busy about is to pro-
duce other and healthy plants of their kind,
so that the stock shall not die out; and while
they are so busy, they are doing all this in
man's behalf. The object of this great oak
here by the road, is not to shade us or the

cattle, not to clean so many pounds of air
to refit it for our breathing; not to grow tim-
ber for ships; not to feed squirrels and mice,
but to produce these acorns—in multitude, so
that while many must perish or be eaten up,
some will live and grow into future oaks.
While doing this, all those other beneficent
acts of shade and oxygenating air, and in-
creasing moisture, and providing fuel, food,
and timber come in its way. So, any man,
who in his life is with all his might working
to some honest end—that end set for him—
does incidentally, and by the way, much
other good. Now, here is an acorn, buried and
sprouted at the root of this tree. Look at it.
The shell, thick and varnished, was to keep
it safe from rot over winter. Here in the
middle, you see the beginning of the big tree-
top in this little plumule, like a white feath-
er, and the promise of all the huge roots in
this little radicle, like another feather.'

'Why, it's a tree—a little, fine picture of a
tree!' cried Rasmus, with great joy.

'Exactly; and these thick parts of the
acorn are to nourish the little plant, to feed
it, and breathe for it, and be its work-shop,
until it is strong enough to work for itself.
These "seed-leaves" are the property, or in-
heritance, laid up by the parent oak for its
young child.'

'And what part of the tree makes the alco-
hol?' asked Rasmus.

'No part; there is none in the tree.'

'Well, in the plant, then—the fruit. They
say, came the alcohol. In all these grains and
kinds of fruit. I've seen 'em. When I work-
ed for the farmer, I carted peaches and ap-
ples and grain to a stillery.'

'And there was not a drop of alcohol in any
of them?'

'How did it come out of them, then?' de-
manded Rasmus.

'They were sound and living things, when
you took them to the distillery. They were
let die, and began to rot; from death and de-
cay, came the alcohol. If all these grains and
fruits is some portion of sugar, greater or
less: the sugar by heat in decay, ferments,
and from the fermentation arises a new sub-
stance, not in the healthy and living plant—
alcohol. Alcohol is death. It is the child of
decay, and it creates decay in living tissues.
You may take a dead bug, or a dead snake,
and bottle it up in alcohol, and it will keep
without rotting. It is by the alcohol protect-
ed from outer air, and the alcohol acts on it
in a measure like cooking it; but put alcohol
in a living tissue, as a man's stomach, and it
produces fever, indigestion, corruption.'

'Is that what makes drinking folks' breath
so horrible, and their skin so liable to break
out in sores? Now, I never had a sore on me,
and if I cut or scratch myself, the skin closes
up directly. My flesh is as nice as a baby's,'
said Rasmus, with great pride, turning up his
shirt-sleeve, and exposing his white and mus-
cular arm. Rasmus was a very magnificent
specimen of an animal, and he was propor-
tionately vain thereof. He took the naïve
satisfaction in himself of a little child, who
stands before a glass, and tranquilly remarks:
'O, I are pretty! How 'feet I am!'

'Then alcohol is a poison,' said Rodney, 'got
by fermentation?'

'Yes. The distiller drives fermentation to
its utmost limit, to turn all the sugar of his
grain or fruit into alcohol. When the wash or
mash is full of alcohol—that is, when all the
sugar has been so turned that can be, for he
will lose a little of it, no doubt—he proceeds
to separate the alcohol by distillation. To
turn this alcohol into various drinks, it is
mingled with water, burnt sugar, cocculus in-
dicus, and a great many other drugs and poi-
sons, all unfit to go into a human body—or
any other body.'

'See here,' said Rasmus, holding out his
hand, after they had walked along in silence
for a while.

He had three hickory nuts on his palm. One
shell was split into two parts: one had a lit-
tle, smooth, perfectly round hole in it; the
third, a small irregular hole.

'They're all empty. What got a dinner
out of them?'

'Squirrels,' said Mr. Llewellyn and Rod-
ney.

'Only out of the split one. Mr. Squirrel