

She mistook what he meant. She was bewildered, distraught.

"No, no—coward!" she cried.

He stopped short as though he had been shot. His face turned white. Then, with an oath, he went swiftly to the window which opened to the floor and passed through it into the night.

An instant after he was on his horse.

A moment of dumb confusion succeeded, then she realized her madness,

and the thing as it really was. Running to the window, she leaned out.

She called, but only the grey mare's galloping came back to her awestruck ears.

With a cry like that of an animal in pain, she sank on her knees on the floor, her face turned towards the stars.

"Oh, my God, help me!" she moaned.

At least here was no longer the cry of doom.

[TO BE CONTINUED.]

## Sunrise in New York

BY ALAN SULLIVAN

LIKE a prone Titan breathing in the night,  
The city stretched to the horizon's verge;  
Her blank immensity was ribbed with light,  
Sprinkled, pin-pointed, and flung far to merge  
With depths invisible that mocked the sight.  
A thousand thousand voices, like a dirge,  
Blent in one indistinguishable sigh  
That rose insistent to the unheeding sky.

From the deep sea crept whispers of a wind,  
From the sea's breast came promise of the sun;  
And the gray heralds of the morn, entwined  
And wrapped in misty vapors, one by one  
Stole silver-footed where the lamps were lined  
Like pallid sentinels whose watch was done;  
And murmurs of the morn began to creep  
Through every drowsy avenue of sleep.

I knew not that the night was changing so,  
I could not tell day was so near at hand,  
But with one rush the darkness seemed to go,  
Revealing all the stark and wearied land,  
The naked tenements and changeless flow  
Of a great wrinkled river, to whose strand  
Marched cyclopean monument and pile,  
Fronting magnificently mile on mile.

The cañons of the city claimed their own,  
Their pigmy population; every street  
Gaped with immeasurable leagues of stone;  
The iron earth herself engulfed the feet  
Of hastening myriads, for the day had grown  
Too pregnant with humanity to meet  
The quick, reiterant demand of men  
Who dreamed and woke—to find their dream again.

# The Conservation of the Fertility of the Soil

BY A. D. HALL, F.R.S.

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THE question of the maintenance of the fertility of the land under continuous farming is now occupying the attention of all settled peoples, because they are returning to a recognition of the fact that agriculture is the only permanent basis of national wealth. Particularly is this question pressing itself upon the United States, where the farming methods have been such as to result in a continuous decline of productiveness, until much of the land in the Eastern States is poverty-stricken and even derelict, and the occupiers who entered upon the immense reserves of fertility of the old prairie lands in the Middle West have been of late years migrating in increasing numbers to the virgin soils of the Canadian Northwest in their desire for land which has not been cropped out.

Three distinct stages may be observed in the development of agriculture, though they merge into one another, and may all be observed simultaneously in the same country because of differences in the quality of the land and the conditions of transit. In the most primitive stage the farmer is practically mining in the accumulated fertility of the soil; he grows a succession of salable crops without fertilizers and without any care for the future; he moves on to new land when his farming ceases to pay under this process of simple exploitation. Everything is taken away, nothing is put back, until the capital of the soil, if not exhausted to the extent that a seam of coal can be worked out, is yet reduced to the stage of giving a small and unprofitable annual return for the labor that is expended. In some cases the exhaustion is long delayed, so great has been the initial accumulated

fertility, as in the Middle West and other natural prairies in Argentina, Russia, etc., where the farmers started with several feet of black soil; but it is none the less inevitable; and on the majority of virgin soils, of which only a small proportion possess great inherent riches, distinct impoverishment may be brought about within a generation or less. In the Eastern States, and on many of the poorer soils of Britain, and in the west of Europe, we may see such impoverished and unimproved land still continuing to return a minimum production in crops, or, more generally, in grazing animals, and yielding a bare existence to farmers whose outlay upon the land is practically *nil*.

But the farmers in western Europe early found that such pure exploitation of the soil becomes unprofitable, and evolved certain systems of farming of the type we may call "conservative," which will yield a continuous succession of crops, not perhaps at very high level of production, but capable of indefinite repetition, because various recuperative forces are brought into play to maintain the fertility of the soil. A good example of this conservative farming may be seen in the old four-course rotation which prevailed very generally in England prior to the introduction of artificial fertilizers in the second quarter of the last century. Under this system, to which the tenants were strictly tied by the covenants of hiring, a crop of wheat was grown once in four years; the grain was sold, but the straw had to be trampled down to manure and returned to the land; the wheat was followed by turnips, also converted into manure and returned to the land; the turnips by barley, of which the grain only