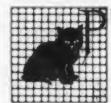
The Scientific Circle.*

BY C. C. NEWKIRK.



ROFESSOR THEOPHILUS WARD was a veritable living and walking encyclopedia of facts. He viewed everything that came before him from the only standpoint he knew—that of science. When Ward looked at the pink of a woman's cheek, there is no doubt but that he

at once began to calculate how many blood capillaries would be necessary to produce the degree of pink apparent; how deep these capillaries lay from the surface of the skin, and what addition, or subtraction, of heat, cold or emotion would heighten or diminish the glow. In short, Ward would look at a rose without seeing its beauty, but its integral parts he would pick asunder that he might analyze them in his cold, calculating, scientific fashion. He once said he had never encountered a problem in books or in life that he had not been able to solve by scientific deduction.

Physically he was tall and angular. As to the manner in which he moved he was ungainly, even awkward. The students called him "Old Cube Root" when his back was turned, or when he was so absorbed that he could hardly have heard thunder. Ward kept himself clean-shaven, but, in contrast to this, he never brushed his clothes. He had cold and keen gray eyes which invariably looked through great silver-rimmed spectacles. It is needless to add that Ward was never married and probably never will be. He would not know what to do with a wife. Possibly such a thing as marrying has never occurred to him.

In 1891 the professor's too close application at the college in which he has for many years held the chair of natural science, began to tell on him. He became emaciated, and it was apparent that his strength was waning, but Ward took no reckoning. He was advised by his physician and his friends to take a few months'

^{*} Copyright, 1900, by The Shortstory Publishing Company. All rights reserved.

rest in a change of scene and air, but he paid no heed. Then his condition became so alarming that a meeting of the college trustees was called and Professor Ward was temporarily discharged from his chair, on full pay, with an appropriation voted to defray the expenses of a three months' vacation, to be spent wherever his fancy might suggest.

Like a philosopher he acquiesced, and the day following started for Mexico, the flora and the mineralogy of which he had long sought an opportunity to study. Theoretically, he was as familiar with Mexico as book knowledge could make him. Professor Ward travelled by rail to New Orleans, from which point he embarked on a passenger and freight vessel bound across the gulf for Vera Cruz. In the railway coaches he sat calmly surveying the panoramic landscape, and on the deek of the vessel, aft, he lounged by the hour, his hat drawn down well over his eyes, which looked vacantly out through those great silver-rimmed spectacles, over the sunlit surface of the tropic gulf.

From Vera Cruz, Ward travelled over the Mexican-Interoceanic Railway northwest to Jalapa. There he tarried two days, picking up all the information he could that would be of value to him on his trip inland and making preparations for the journey. His outfit, which he bought at Jalapa, consisted of a trusty, rather than a beautiful, horse of sufficient weight and strength to carry himself, a repeating rifle, enough provisions for a fortnight, his botanical specimen cases, some drugs and a light mineralogical outfit. Thus equipped Ward left Jalapa and travelled north.

He had enquired earefully as to the possible sources of danger on his intended route, and was assured that he would be perfectly safe from molestation so long as he remained on the main road. But his plans did not permit of adhering to this altogether, and he was especially warned against a belt of very rough and rocky country, some half a mile or more in width, which he would enter after erossing what was known locally as "the divide." Amid the precipitous erags of that desolate region, where an ineautious step or a deliberate push would send a man to swift and horrible destruction, many travellers had disappeared, and not by accident alone.

When the Professor had covered perhaps fifteen miles of plain, swamp and wood, the path became narrower and his progress

slower. When, at the end of a three hours' journey, he dismounted to tighten the saddle girth, he discovered the loss of a blanket, which had worked from under him. He remembered having seen it in place only a short time before and believed he would find it not far to the rear. Hitching his animal, he started back afoot. The quest led him a vain quarter of a mile, when he was suddenly diverted by what sounded like the tamptamp of a horse's hoofs, around a turn in the route over which he had ridden. There was a thick growth of timber, and he could see nothing. Acting on a first impulse, he stepped a few feet to the side and entered the obsenrity of some twining vines. In this covert he waited.

The hoof-beats drew near, and presently a mounted man rode into full view and stopped. The rider was a swarthy Mexican, with flowing black hair and his steed a magnificent roan. Across the pommel of his saddle the Mexican balanced a Winchester, and, leaning forward, he studied the ground over which Ward had ridden. Strapped behind the rider the professor espied the blanket he had lost.

Why had the Mexican halted? Why was he carrying his rifle unshing? Why did he examine the ground ahead?

While Ward was weighing these things over the man on the horse rode forward and passed from sight. The scientist then became concerned for the safety of his own horse and equipment and followed stealthily in the rider's wake, keeping himself under cover and the Mexican in view. Thus the unique procession moved ahead to a point where Ward's horse came into view of the mounted man, who instantly crouched in his saddle, pulled his horse about, and moved noiselessly but more rapidly on the back track. Again Ward stepped aside into concealment and again the Mexican passed him, looking backward frequently. By a détour Ward reached his horse, mounted and proceeded with such apparent unconcern that he did not once look behind him. One would have thought he had forgotten the strange occurrence entirely. On the contrary he was carefully working out its solution, thus:

"The man behind me is a Mexican highwayman — a personage by no means uncommon in this territory. He is at this moment, and has been for several hours, dogging my trail. He will pursue these tactics until I leave the beaten path and strike off through the rocks across the divide. Then he means to shoot at me from behind, take my horse and effects and throw my body over a precipice! He believes me to be in ignorance of his presence and means to keep me so to the end. He is trailing me as much by broken twigs and earth marks as by sight, and can follow me unerringly and yet remain a mile or more behind. There is to be no open fight. I am not to have an equal chance. It is to be assassination. This move will not be attempted immediately. Fortunate thing I lost the blanket!"

The professor went into eamp at sun-down. He chose a spot of considerable area, free from timber and much in the form of a natural clearing. In its centre he boldly built a fire and cooked supper, confident that, until he crossed the divide he would be perfectly safe. Afterward he opened his assortment of drugs and selected from among the many small phials one bearing a red label and containing a thin, colorless liquid, hermetically sealed. Instead of the ordinary stopper the bottle was provided with an automatic injector. This fluid was one of Professor Ward's triumphs in chemical discovery. Its most remarkable property was that on being exposed to the air its expansion into a gas was instant. Moreover, its particles as quickly permeated the atmosphere to an extent proportioned to the amount exposed, rendering senseless and helpless any living thing within its influence, for a period of from fifteen to twenty-five minutes, or until the gas became so widely diffused as to lose its power. In short, its action and effect was much like that of chloroform, except that the sensibilities of man or animal were paralyzed instantly.

The professor next took from his belt a Winchester eartridge, and after some difficulty removed the lead ball, leaving the charge of powder in the shell. He then inserted an air-tight, two-grain gelatine capsule of double strength, full of the mysterious liquid, being eareful not to release any of it. This eapsule he forced into the shell against the powder. The last step was to place the curious missile in his Winchester so that it would be the next load under the hammer. Ward then lay down, and feigned to sleep, knowing that where he was he was safe from attack, but kept such

perfect virgil as to feel sure that the Mexican could not have passed his camp that night undiscovered.

At daybreak the professor started forward. There was nothing in his demeanor to indicate that he knew himself to be followed. After he had been in the saddle a short time he took from his poeket a small compass, which he earried in his left hand, directing the horse with his right. As he left the eamp behind him he increased his pace, pushing the animal as fast as the growth of trees and brush would permit. Any one who could have watched the compass needle as to its bearings with reference to the direction the horse was moving would have concluded Ward to be traveling in a large circle. This was true, but a man following would not have suspected it, first, because of the circle's great eireumference, and, second, because the mountains, or other elevations which might disclose the fact, were, at the point chosen by the professor, conecaled by forests. The scientist's purpose was now apparent. He had adopted a eurious strategy to gain a position to the rear of the Mexican without the latter suspecting it.

An hour's riding brought Ward to the point where he had started on his circular route, and so accurate were his calculations that he did not vary but a few feet from the trail. Dismounting, he earefully examined the ground, and as he elimbed back into the saddle smiled grimly, something rare for Ward. The Mexican was ahead. Ward had found the hoof-marks of the roan. Again the seientist proceeded rapidly, yet with extreme eaution. As he bent forward in the saddle and peered ahead through the silverrimmed spectacles, he presented a most grotesque appearance. He had thus traveled in the Mexican's wake more than a mile, His usually imperturbable nature was keyed up to a snapping tension, not so much through fear as in anticipation of a new experiment. Suddenly he stopped abruptly and slipped from his horse. Leading the animal from sight he hastily tied it. Then he stole forward a short distance and dropped on one knee. About fifty yards ahead of him leisurely rode the Mexican. Quickly Ward brought his Winchester into position until the muzzle hung steadily and the broad back of the Mexican filled the sights on the barrel. Then the scientist pressed the trigger and jumped to his feet.

Almost simultaneously with the report of the rifle the roan

and its rider sank to the ground. The elated Ward started to run forward, but as he advanced was seized with a feeling of giddiness and, realizing that he was approaching the sphere permeated by the powerful gas, he beat a hasty retreat. Gradually the power of the anæsthetic became so diffused as to allow him to go forward a second time. The unconscious Mexican lay with one leg pinned under his horse's body. Ward pulled him free, but only to bind him securely with a part of his own trappings. But a few minutes passed before the highwayman opened his eyes. When they met Ward's they flashed in terrible hate and as the man made an effort to rise he discovered, for the first time, that he was a helpless prisoner.

Ward nearly lost his equanimity at the outcome of affairs and at the suecess of his experiment. Undoing the prisoner's feet, but leaving his arms pinioned, Ward managed to lift him astride the roan and lash the highwayman's feet together under the horse's belly. Five hours later the exultant Ward entered Jalapa astride his own horse and leading behind him the roan on which sat the Mexican, tied to its back, outwitted and humiliated. The prisoner was turned over to the authorities and proved to be a notorious bandit, who for many months had terrorized the Vera Cruz country. Ward, having proved himself able to cope with all the dangers of the region, at once returned and systematically gathered all his desired specimens, and then departed for Yucatan, where the remainder of his vacation was pleasantly, safely and profitably spent.

Against the wall in the scientist's library rests a rifle. It is silver mounted and beautifully carved, with its rich ebony stock artistically inlaid with curious designs in ivory. Ward prizes it, not so much because it was once the property of a man who would have taken his life in a far-away country, but because it is a souvenir of a problem which his science solved.

