

"Come up!" yelled Hennessy, placing an open-handed slap across the jaw of the amazed Mr. Jones.

odorous garbage cans along the slippery gutters, the sound of many voices in many languages, the roar and rattle of the trucks and the loud, deep curses of their drivers. He thought of his many triumphs in the ring, and the few defeats; of the excitement and secrecy attending these pugilistic meetings, and the several times they had been interrupted by the officials of the law. His memory carried him back to his earlier days, when, clothed in native innocence, he wallowed in the greasy but delectable East River.

These painfully pleasant thoughts brought a suspicious dampness to his eyes and a lump in his throat, and he heaved an involuntary sigh of despair.

He arose, knocked the ashes from his pipe, and glanced down the dreary street. A cloud of yellow dust came up far out upon the plain toward Big Tank, the railroad station ten miles to the east. Hennessy watched its approach with deep interest. Anything which exhibited motion at mid-day, in or near Salamander, always evoked interest. As the dust-cloud drifted nearer, Hennessy discovered that the nucleus of the disturbance was a horseman. His interest died out to a certain extent, as horsemen were exceedingly common. The approach of a man unmounted would have been a rarity indeed. He crossed the road in a diagonal direction; his feet, sinking ankle-deep in the floury dust at each step.

Pausing at the entrance of the "Ragged Edge Cafe," he again glanced up the deserted thoroughfare, and noted that the equestrian had just entered the straggling lane between the buildings in the eastern suburb. He opened the door, which had been closed to keep out the fierce heat, and entered.

THE "Ragged Edge Cafe" bore little resemblance to the liquidating depots of Manhattan, with which Hennessy was familiar. A long bar, resembling a wagon-box upturned on its side, and bearing evidences of having been used as such at some time in the past, but now disguised by a coat of dirty brown paint, was stretched down one side of the room. Behind it was a back-bar made of a single plank, on braces fastened to the wall, and draped with an elaborately patterned oil-cloth. A meagre display of drinking glasses were spread over as much space on the shelf as possible, flanking a small but highly injurious platoon of multi-colored bottles occupying the center. The 'sober' side of the bar was presided over by a swarthy, short, heavily built gentleman with a pair of fierce moustaches, which curved down and back like the tusks of a walrus. From the many indentations upon his head and face, it would seem evident that this important personage had led a somewhat checkered career.

Hennessy's advent aroused a spasm of interest in the minds of the half-dozen thirsty loungers; four of whom were balanced gingerly upon empty casks in lieu of chairs, while the remaining two listlessly rattled a set of dice upon the farther end of the bar.

The presiding officer raised his eyes from an inspection of a four weeks' old illustrated paper, and bestowed a nod upon the new arrival. Hennessy returned the salutation, and, casting his eyes significantly at the assemblage, made a side motion of his head toward the array of bottles.

As one man, they arose with jingling spurs and rattling accoutrements, and formed a company-front at the bar.

Mr. Hennessy's standing at the "Ragged Edge"

had been established some weeks before, by his prodigality of ready money, and his reason for sojourning in God-forsaken Salamander, had become common property. As a "lunger", he was a new departure from their established idea: That the "white plague" could find a lodging place in such a wiry, big-boned, sinewy frame, was beyond all precedent, and his personal appearance, together with his loose financial habits, had brought him a degree of popularity; dimmed though it was, by his abstinence from intoxicants.

The brown bottle traveled to his end of the bar, and Hennessy poured out a liberal libation, and let it trickle slowly and luxuriously down his throat.

"Gents, I'll tell ye," he said, in response to the exclamations of surprise from his guests, "that's th' first real drink in two months. I've been keepin' tabs on my valves, an' I've come to th' conclusion that I'm pretty close up to th' undertaker. Youse fellers needn't think I'm meditatin' suicide; I'm goin' to live my remainin' days as th' cham-

peen middleweight o' th' Seventh ward o' th' only place on earth, ought to."

Mr. Hennessy's declaration was punctuated by a fusillade of reports from the street. The company, with reassuring pats upon their side-artillery, stealthily reconnoitered from the front windows.

"Say Bill," said Hennessy, turning from his point of observation, to the man behind the bar, "it's that big bluff from Big Tank. One-eared Jones, on a buckskin cayuse. He's over in front o' th' 'Palace Hotel,' pluggin' out th' winder panes. What ye goin' to do 'f he comes gunnin' in here?"

"Do!" exclaimed the cautious William. "Do! I ain't goin' to do nothin'. That feller's been th' means o' removin' several prom'nent citizens from this 'ere burg. An' as I'm havin' quite a pleasant time livin', jest at present, I don't cal'late to chuck th' job."

"Would he shoot?" inquired Hennessy.

"Would he? Why say, young feller, ev'ry time that galoot gets saturated with that liquid dryer at Big Tank, he jest nat'rally sifts over to this metropol'is to vent his spite, an' practice gun play on our law-abidin', peaceful citizens. Will he shoot? In forty seconds, he could make yer vest look like a peek-a-boo shirt waist."

"BILL," said Hennessy, earnestly, "back in th' good old town I call 'home,' when a feller comes into yer place an' starts to makin' a bluff, generly somebody around th' joint calls 'im. Now, I ain't so fond o' clingin' to this dumpin'-ground o' th' United States, as to let a loaded skate like him hocus me. If he comes wallerin' in here, four-flushin' I'm goin' to surprise 'im. If he does fur me, all right—all right. But if I've still got th' punch, an' I git it in on 'im, I'll be doin' a darned sight better fur Salamander than she's done by me. You won't be troubled by One-Eared Jones with his toy pistol any more er I lose my bet, an' don't ye forget it."

Hennessy turned to the window again, and made a rapid mental calculation. His chances of repairing his diseased lungs in this climate were very vague indeed. The longer he waited, the lower his finances became. If he stayed until they were exhausted he would become a burden upon the community; eventually going to swell the number in the little cemetery at the public's expense, unmourned, unsung. Here came the "chance," as Hennessy termed it, to "get a run for his money." One-Eared Jones was an adept in gunnery; it would be quick and certain.

Mr. Jones, of "one-eared" fame, ceased punctuating his lurid and denunciatory remarks concerning

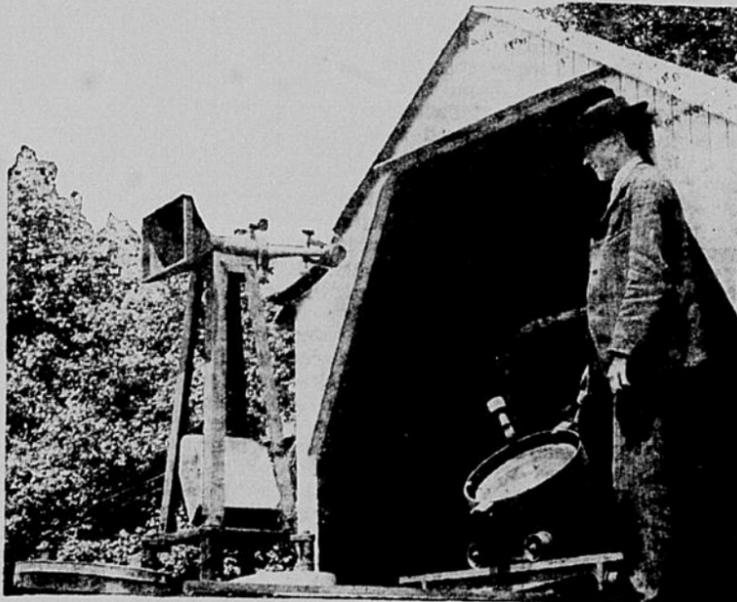
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Measuring the Heat of the Stars

SCIENTIST claims that if ten million dollars were placed at his disposal he would be able to flash rays of light to Mars and let the inhabitants of that distant planet know there are some live ones on this earth. But, if as yet, we have been unable to communicate with the Martians, we have at least been able to measure the heat of the nearest star next the sun, Alpha Centauri, so far distant that it takes four years for its light to strike the earth. And that is going some, when it is recalled that light shoots through space 186,000 miles at every tick of the watch. Beyond that the next sun is "61 Cygni," which is eight "light years" away. It was believed until recently, owing to the enormous distance we are from the stars, that a ray, however intense, could scarcely carry the most infinitesimal fraction of a degree of temperature through such astounding gaps of space. But astronomers went to work and devised the most extraordinary and delicate little instrument that was perhaps ever created. And what is left of the heat of a star a few billion miles away, after it reaches this earth, can be most accurately measured.

The star ray is first caught on a large mirror disc, which is concentrated by a second mirror that throws it upon a thread of platinum. This thread is about as fine as that spun by a spider. A current of electricity is kept flowing through this platinum. The amount of resistance of a metal to an electric current depends on the temperature of the metal. The effect of the ray of starlight was measured in this fashion. The delicate instrument referred to consists of a balance, its beam being a thread of spun glass five inches in length, and of a

diameter less than a human hair. A bit of mirror no bigger than a pin head, is set in the middle of this beam or thread of glass and this is fastened upon a square piece cut from a dragon fly's wing. A fibre of spun crystal supports the whole. A ray of candle light is made to fall upon the miniature mirror, which throws it back upon a measuring scale of white paper. As the ray of star light falls upon the platinum thread the electrical resistance changes correspondingly and the beam of the balance, that is, the thread of spun glass, moves. In moving, it changes the position upon the measuring scale of the reflected ray of candle light and thus the change in position of this dot of candle light shows the amount of heat that reaches the earth from the star ray.



The instruments for measuring stellar heat.