# Ghe GIRLand the GAME (a) ) I A STORY OF MOUNTAIN RAILROAD LIFE 6y FRANK H.SPEARMAN 

AUTHOR OF "WHISPERING SMITH," "THE" MOUNTAIN DIVIDE," "STRATEGY OF GREAT RAILROADS," ETC.



Centrifugal Effect of the Earth's Rotation

|  | caused by the centrifugal foreo, is naturally junt enough to balance lis effect. |
| :---: | :---: |
| The woight of at body at the equatorbing compounded of the kravitational boing compounded of the grath, minut hore puintruatal force of rothation of thetharth tendink to throw it into unace, why earth tenaing to body wotsh morert or ordoese not namdnear the poles. where the eentrifugal torce in nonexintent? |  |
|  |  |
|  |  |
|  |  |
|  |  |
| north or south pole to the equator would |  |
|  |  |
|  |  |
| whose weikht was 101 pounds ar he atood on one of the poles would weligh only 192 pounde if the went to the equator |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| Which involves the whole problem of the shape of the earth, and of the exiatence of conditions which make it posesible |  |
|  |  |
| and a comfortable abode for us, although 1 suapeet that the great misority of |  |
|  dreaming of what they owe to the centrifugal effectes of the earth's rotation Let yue noe mome of the surprising regulter that this remarkable "force" pro- |  |
|  |  |
|  |  |
|  |  |
|  |  |
| supes. <br> The lons of welght at the equator in |  |
| due to two thingm, firot directly to the centrifural force, and second to the deformation of the earth which that forco |  |
|  |  |
|  |  |
| han produced. The direct tons by centrifugal force is $1-299 t h$ of the force of the kravity at the equator. The tadireot lose comen about through |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| trifugal force, so that the surface at either pole in about thirtien millen nearer the center of gravity of the earth than |  |
| the center of sravity of the earth than Is the surface at the equator, But the erease of distance from the center. It |  |
|  |  |
| crasse of distance from the canter. It repulta that the attraction of the earth upon a body on ft aurface is 1 -spoth |  |
|  |  |
| upon a body on tos surface is 1 -sioth part lems at, the equator than at the poles. SAding the two fractions |  |
| poleen. Adaing <br>  anid, is the aotual amount of the lons |  |
|  |  |
| compared with the welght at the poles. |  |
| ocour suddenly at the equator; there is more |  |
|  |  |
| or lass lons at every point on the earth, tncreasing as you go from the poles to |  |
| the equator. Between thone two final potnts, howover, there in another and avery remarkable, effoct of the centri- |  |
|  |  |
| very remark fogat torce. <br> That fores is not directed away from the center of the siobe, but perpendloularly away from lit axis of rotation. On the equator this is equivalent to alrection away from the oenfer, but in |  |
|  |  |
|  |  |

Would your skin stand this test?

## Resinol soap

ally beautiful skin as to cover up
poor one with cosmetics it lessens
the tendency to pimples, rednee the tendency to pimples, redness
and roughness, and in a very thort
time the complexion usally be
comes clea, freth and velvety.


